



**PILOT TEST RESULTS FOR ION EXCHANGE RESIN
AND GRANULAR ACTIVATED CARBON TO TREAT
GROUNDWATER IMPACTED WITH PER- AND
POLYFLUOROALKYL SUBSTANCES**

MONTEBELLO LAND & WATER COMPANY

WATER SUPPLY WELL #7

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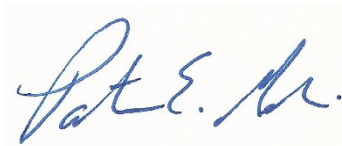
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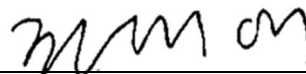
Water Replenishment District of Southern California

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ABBREVIATIONS

AV – AqueoUS Vets
BV – Bed Volume
DDW – Division of Drinking Water
EPA – United States Environmental Protection Agency
DOC – Dissolved Organic Carbon
ft² – Square Feet
ft³ – Cubic Feet
GAC – Granular Activated Carbon
gpm – Gallons per Minute
GSI – GSI Environmental Inc.
IX – Ion Exchange
mg/L – Milligrams per Liter
ng/L – Nanograms per Liter
kW – kilowatt
kWh – kilowatt-hour
LHHCWD – La Habra Heights County Water District
MTBLW – Montebello Land & Water Company
NPDES – National Pollutant Discharge Elimination System
NPV – Net Present Value
O&M – Operation and Maintenance
PFAS – Per- and Polyfluoroalkyl Substances
PFBS – Perfluorobutanesulfonic Acid
PFHpA – Perfluoroheptanoic Acid
PFHxA – Perfluorohexanoic Acid
PFHxS – Perfluorohexanesulfonic Acid
PFNA – Perfluorononanoic Acid
PFOA – Pefluorooctanoic Acid
PFOS – Perfluorooctanesulfonic Acid
psi – Pounds per Square Inch
TOC – Total Organic Carbon
TSS – Total Suspended Solids
WRD – Water Replenishment District of Southern California

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EXECUTIVE SUMMARY

In an effort to meet anticipated drinking water regulations for per- and polyfluoroalkyl substances (PFAS), Water Replenishment District of Southern California (WRD) retained GSI Environmental Inc. and Hazen and Sawyer (GSI Team) to conduct pilot testing to evaluate the performance and life cycle costs for ion exchange (IX) and granular activated carbon (GAC) to treat groundwater impacted by PFAS including perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS).

The pilot-scale study involved testing the ability of 8 types of adsorbent media (four IX resins and four GACs) to remove PFAS from water sourced from Montebello Land & Water Company (MTBLW) Well #7. The site was selected to be representative of typical PFAS concentrations for WRD wells with PFOA concentrations that exceed the current 10 nanograms per liter (ng/L) response level (RL). The results for the 12-month pilot test, were then used to develop 20-year life cycle costs that could be used by WRD well pumpers to select a suitable PFAS treatment media. The pilot skid was built by AqueoUS Vets in collaboration with the GSI Team, who operated the skid during the duration of the test. Empty bed contact time (EBCTs) for the GAC test columns were selected to match a typical full-scale GAC EBCT (10 minutes), while a shorter EBCT (1.2 minutes) was selected for IX resin due to concerns over testing duration. The pilot skid was monitored daily, and flowrates were adjusted periodically to correspond with the design pilot test EBCTs for the GAC and IX media. Influent water was pretreated with a 5-micron cartridge filter to prevent fouling. Overall, the pilot skid operated effectively over the pilot test duration, with only short period of shutdown for well maintenance.

Of the three PFAS with California drinking water RLs, PFOA was consistently observed to be the driver for media changeout. Of the GACs tested, F400 treated the most water prior to anticipated breakthrough at the 10 ng/L RL for PFOA. Because the effluent PFOA concentration for F400 had not yet reached 10 ng/L by the end of the test, 52,500 bed volumes (BVs), linear extrapolation of partial breakthrough curves was used to estimate the 10 ng/L PFOA breakthrough time of approximately 54,000 BVs. Breakthrough curves for the three other GAC media reached 10 ng/L by the end of 12-month test. Of the four tested IX resins, only PFA694E had broken through with respect to the PFOA RL at approximately ~381,000 BVs. The same linear extrapolation approach that was applied to the GAC F400 was applied to the three other IX media to estimate the 10 ng/L PFOA breakthrough BVs. Based on the results, PSR2 Plus was determined to be being the best performing resin with an estimated bed life of ~675,000 BVs.

The overall cost-effectiveness of all tested media was evaluated using life cycle cost analysis that involved the development of cash flows to represent capital and operation and maintenance (O&M) costs. These cash flows were converted to net present value (NPV) for ease of comparison between alternatives. Key assumptions were made to simplify the cost estimation process including a 20-year operational life, lead-lag treatment vessel configuration, exclusion of costs that were equal among alternatives, landfill disposal of spent IX resin, and manufacturers' regeneration of spent GAC. Based on the sensitivity analysis, the GAC life cycle costs were found to be more sensitive to uncertainty in bed life estimates than those of the IX resins. Using this approach, the PSR2 Plus IX resin was found to be the most cost-effective media for removing PFAS from MTBLW Well #7 with a net present value cost of \$1,760,000.

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1.0 INTRODUCTION

On behalf of the Water Replenishment District of Southern California (WRD), GSI Environmental Inc. (GSI) has prepared this report to present the pilot test results for ion exchange (IX) resin and granular activated carbon (GAC) to treat groundwater impacted with per- and polyfluoroalkyl substances (PFAS). GSI's team also includes technical support provided by Hazen and Sawyer and AqueoUS Vets (AV).

1.1 Report Organization

This report is organized as follows:

- Section 1 – Introduction
- Section 2 – Pilot Test Design
- Section 3 – Sampling and Analysis
- Section 4 – Results
- Section 5 – Data Evaluation and Discussion
- Section 6 – Life cycle Cost Analyses
- Section 7 – Conclusions
- Section 8 – References.

1.2 Background

PFAS are a group of man-made chemicals that include perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), and many other chemicals. PFAS have been manufactured and used in a variety of industries since the 1940s, and PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both chemicals are persistent in the environment and in the human body and exposure to unsafe levels of PFOA/PFOS may result in adverse health effects (USEPA, 2017).

PFOA and PFOS do not currently have maximum contaminant levels (MCLs) in California or at the federal level, however California has set notification levels (NLs) and response levels (RLs) for both contaminants. When the concentration of PFAS exceed their respective NLs in drinking water, water purveyors are obligated to inform their customers of the exceedance as well as fulfill other requirements. When drinking water from a drinking water source with PFAS concentrations exceeding the RLs is served to customers, the water system is required to:

- Report the elevated detection in its annual consumer confidence report; and
- Either remove the water source from use or provide public notification within 30 days of the confirmed detection.

DDW has issued the following recent updates to the NLs and RLs for PFAS:

- In August 2019, the State Water Resources Control Board's Division of Drinking Water (DDW) issued updated drinking water NLs of 5.1 and 6.5 nanograms per liter (ng/L), or parts per trillion (ppt), for PFOA and PFOS, respectively;

- On February 6, 2020, DDW issued updated drinking water RLs of 10 ng/L for PFOA and 40 ng/L for PFOS; and
- On March 5, 2021, DDW issued drinking water NL and RL of 500 and 5,000 ng/L, respectively, for perfluorobutanesulfonic acid (PFBS).

WRD commissioned the pilot test described in this report to assess the effectiveness and efficiency of several GAC and IX products on the Montebello Land and Water Company Water Supply Well #7 water and to develop typical life cycle costs for treatment of the pumped groundwater using these two types of treatment media (GAC and IX) to meet the RLs for PFOA and PFOS. It is intended that the data produced in this report will inform future permitting efforts with the DDW.

1.3 Pilot Test Objectives

The objectives for this pilot test were:

1. To evaluate the efficiency and effectiveness of four different types of GAC and four different types of IX resin for PFAS removal. To assess the PFAS breakthrough through these media as well as each media's ability to remove PFAS compounds to below the RLs.
2. To compare the IX treatment results with the vendors' predictive models to demonstrate the utility of these models for planning effective water treatment.
3. To estimate water treatment life cycle costs, including both capital and operation and maintenance (O&M) costs for each type of GAC and IX resin.
4. Provide a recommendation as to the most effective treatment option for Water Supply Well #7.

2.0 PILOT TEST DESIGN

This section addresses the selection of the pilot test well, the media selection process, and the pilot test design. A description of the criteria that were considered during test well selection is presented in Section 2.1. The treatment media selected for testing are described in Section 2.2. The GSI team coordinated with AqueoUS Vets to design the test skid as described in Section 2.3.

2.1 Pilot Study Well Site Selection

Multiple groundwater production wells were considered to provide the source water for the pilot tests. Ultimately, the following two sites were selected:

- SITE #1 - Montebello Land & Water Company Water Supply Well #7 (MTBLW Well #7)
- SITE #2 - La Habra Heights County Water District Water Supply Well #10 (LHHCWD #10)

The well sites are shown on **Figure 1**. This report presents the pilot test results of MTBLW Well #7 (shown on **Figure 2**). The results of LHHCWD #10 are presented in a separate report. MTBLW Well #7 was selected because:

- The PFOA and PFOS concentrations exceeded the DDW RLs.
- The well was located near the Rio Hondo spreading grounds where surface water is percolated into the ground, replenishing the underlying aquifer. These spreading grounds represent a separate groundwater recharge source from the source water feeding another WRD pilot test conducted in La Habra Heights (San Gabriel River).
- The well could be operated continuously for a long period with minimal shutdown.
- There was adequate space and security at the well location to support the pilot test skid. The MTBLW staff could provide day-to-day pilot test technical observations and support.

- The well sulfate concentrations were sufficient such that PFAS breakthrough time for the IX media was expected to be shortened. The presence of elevated concentrations of sulfate may reduce the IX bed life, depending on the resin and its selectivity for sulfate (i.e., sulfate may take up some of the adsorption capacity on the resin surface and decrease the space available for PFAS). This expected reduction in test duration would be helpful, given the limited time available to complete the pilot testing.

The MTBLW and WRD provided the following facility and well details to the GSI team prior to pilot test implementation to aid in the design of the treatment skids and the calculation of projected pilot test duration:

Site Location:	344 E. Madison Avenue, Montebello, California (located near the Rio Hondo spreading grounds)
Pumping Rate:	1,500 gallons per minute (gpm)
Discharge pressure:	65 pounds per square inch (psi)
Notable Water Constituent Concentrations:	PFOA - 20 to 23 ng/L PFOS – 34 to 45 ng/L Sulfate – 87 to 144 milligrams per liter (mg/L) Total organic carbon (TOC) – 0.6 to 1.1 mg/L
Other Considerations:	Treated water from the pilot testing could be discharged through an existing discharge under the facility’s National Pollution Discharge Elimination System (NPDES) permit

2.2 Media Evaluated During Pilot Tests

Four unique GAC products and four unique IX resins were used for the pilot test. The process used to select these products for testing is presented in this section. The manufacturers’ specifications for these products are included in **Appendix A**.

2.2.1 GAC Selection Process

The four selected GAC products are bituminous coal-based carbon products. Based on the previous GAC pilot studies using different types of carbon published in American Water Works Association Journal in January 2018 (McNamara et al., 2018), coal-based carbon resulted in markedly better PFAS removal than coconut-based carbon; therefore, the coconut-based carbon was not used for this testing. The GAC products selected were:

Provider	Product Name	Description
AqueoUS Vets®	AV 1240 Coal Base (AV1240CB)	Direct activated virgin bituminous coal carbon
AqueoUS Vets®	AV 1240 LDX (AV1240LDX)	Direct activated low-density virgin bituminous coal carbon
AqueoUS Vets®	AV 1240 PFAS (AV1240PFAS)	Proprietary carbon, seen to have enhanced performance showing longer carbon bed life
Calgon Carbon	Filtrisorb® 400 (F400)	Reagglomerated virgin bituminous coal carbon

As shown in the GAC summary table above, there are two different coal processing methods used in the manufacture of GAC: direct activation and reagglomeration. Direct activated carbon is produced when the source carbon material (in this case coal) is pyrolyzed at high temperatures, typically in an inert atmosphere. Alternatively, this can be accomplished by exposure to oxygen or steam at very high temperatures. This activation process creates an extremely high surface area material. Reagglomeration is the process that converts a raw coal material to a virgin coal GAC. Domestic coal carbons are reagglomerated because the coal raw material is soft and would lose about 50% of its mass to attrition if it were to be direct activated. To prevent this attrition, the carbon is first pulverized to a powder and a binder is added to create coal briquets. The briquets are then activated to produce GAC. Reagglomeration is not a performance enhancing process but necessary to efficiently use the softer domestic coal products with minimal attrition. Both direct activated and reagglomerated carbon were included in the pilot test to assess their PFAS removal effectiveness and to provide additional GAC sourcing opportunities to owners of groundwater treatment systems, assuming the pilot test does not demonstrate a significant performance difference between direct activated and reagglomerated GAC.

The types of GAC that were selected for this pilot test are described below. All four types are 12 x 40 mesh size, which means the majority of GAC media (approximately 90 to 91% by weight) passes through a United States standard size 12 mesh screen but is retained on a standard size 40 mesh screen.

- The AV1240CB is a direct activated 12 x 40 mesh bituminous coal carbon.
- The AV1240LDX is a low density, direct activated 12 x 40 mesh bituminous coal carbon. This low-density characteristic of this bituminous coal carbon is due to the geographical location from where the raw carbon is sourced (mined). The coal is sourced from a country which is not affected by tariffs, reducing purchase cost. Also, the weight of low-density carbon (carbon is sold by the pound) is less to fill the same bed volume. By including a low-density carbon product in this test, the efficiency and economics of this product can be evaluated and compared to the regular density GAC.
- The AV1240PFAS carbon is a new carbon to the market that has shown some promise for PFAS water treatment based on limited product performance data. At the time of selection, AqueoUS Vets® reported that AV1240PFAS carbon had only been tested in a few rapid small-scale column tests (RSSCTs) and few full-scale GAC water treatment sites.
- Calgon F400 is a reagglomerated bituminous coal carbon. F400 was selected for use in the WRD pilot tests due to its demonstrated good performance in previous studies by others (Liu et al., 2019).

The Calgon F400 and two of the AqueoUS Vets® AV carbon products represent commonly-available GAC water treatment products. There are multiple vendors that offer their own branded carbon that are similar to the AqueoUS Vets® AV products (based on our comparison of the product specifications). This provides multiple sourcing opportunities for the pumper that is planning or maintaining a water treatment system. This is also true for the Calgon F400 GAC - Cabot Norit offers a GAC 400 reagglomerated carbon which has similar specifications and may perform similarly. The exception to this comparison is the AV1240PFAS which is a proprietary carbon.

IX Selection Process

There are several PFAS-selective IX resins currently available. Each of these resin products is a “single-use resin” meaning the resin product is used once and then removed for disposal (i.e., not

reactivated). Currently, most PFAS resins are disposed by landfilling or incineration. The paragraphs below list each resin and provide a brief description of the product and why it was selected for the pilot test.

- Purofine® PFA694E by Purolite is a polystyrenic gel PFAS-selective single-use ion exchange resin. Purolite is a leader in the current PFAS water treatment market.
- Dow Chemical Dowex PSR2 Plus is a strong base anion exchange resin that was initially developed for the removal of perchlorate from potable water. This resin has been shown to be effective for PFAS removal.
- ResinTech SIR-110-HP is a is a PFAS, nitrate, and perchlorate selective strong base anion resin that is less affected by sulfate ions. ResinTech’s product testing has shown effective removal of PFOA, PFOS, as well as many other PFAS compounds.
- Resinex PFCR-2 is a strongly basic gel-type anion exchange resin, specifically developed for selective PFAS removal from potable water in the presence of high concentrations of sulfate.

Provider	Product Name	Description
Purolite	Purofine® PFA694E (PFA694E)	PFAS selective single-use IX resin
Dupont	PSR2 Plus	Perchlorate selective single-use IX resin
ResinTech	SIR-110-HP	PFAS selective single-use IX resin
Resinex	PFCR-2	PFAS selective single-use IX resin

The pilot test equipment was not NSF compliant – the NSF compliance was not necessary during pilot testing because the water was discharged under the facility NPDES permit and was not reintroduced into the water supply after treatment. The GAC and IX resins used are NSF 61 compliant.

2.3 System Design

The pilot test was designed to simulate full-scale operating conditions of the GAC columns with an empty bed contact time (EBCT) of approximately 10 minutes, consistent with manufacturer’s recommendations. For the IX columns, a slightly accelerated flow rate was selected with the goal of limiting the total test duration. There was concern that the IX resin may have very long breakthrough times such that the test could not be concluded during the planned six-month duration. Therefore, a reduced resin bed volume and an increased flow rate were used to reduce the EBCT (by 50%) as well as the test duration. Furthermore, MTBLW Well #7 was selected because it contained a higher sulfate concentration than other surrounding pilot test candidate wells. This higher sulfate concentration was expected to shorten the resin life and thus shorten the test duration. It was expected that the IX resin testing would last as long as five months in total duration. As previously mentioned, another objective of the IX testing was to compare the results to the vendors’ predictive models and therefore, the selection of wells with higher

concentrations of sulfate would not bias the results, performance evaluation, or life cycle costing. The GAC and IX pilot test scale and test conditions are summarized below.

Pilot System Conditions

Item	GAC	IX	Units
Flow Rate	0.25	0.72	gpm
Number of Trains	1	1	none
Vessel Diameter	0.33 (4")	0.25 (3")	Feet (inches)
Bed Volume	0.24	0.12	cubic feet (ft ³)
Vessel Area	0.09	0.05	square feet (ft ²)
Bed Depth	4.0	2.4	feet
Depth to Mid-column Sample Port	2.06	0.73	feet
Surface Loading Rate	2.9	14.7	gpm/ft ²
Flow/Volume	0.7	6.0	gpm/ft ³
EBCT	10.2	1.2	minutes
Approximate Treated Volume per Day	360	1,037	gallon

3.0 FIELDWORK, SAMPLING, AND ANALYSIS

In this section, the details of the test skid installation and startup are presented, including details of various challenges that occurred at startup. Following this, details of the well water and treated water monitoring, sampling, and laboratory analyses are provided. The treatment system monitoring, tuning, adjustments, and other pilot test maintenance is reviewed. Finally, a discussion of the pilot test duration is presented.

3.1 Test Skid Installation and Startup

The pilot test skid was fabricated by AqueoUS Vets® in their Redding, California plant. **Figure 3** is a piping and instrumentation diagram for the test skid, showing the location of the sediment filter, water distribution and collection manifolds, flow control valves, sampling ports, flowmeters, and flow totalizer. Prior to transport, AqueoUS Vets® sourced and filled three of the GAC columns and three of the IX columns to the specified design heights in their Redding facility. The skid was transported to the MTBLW Well #7 site on April 17, 2020, where it was offloaded, set in its final location, leveled, and secured (refer to **Appendix B** Photolog, Photo 1).

Once the test skid was on site, the fourth GAC column was filled with Calgon F400 GAC and the fourth IX column was filled with SIR-110-HP resin to the specified column heights. Those two products were shipped directly to GSI for inclusion in the test.

GSI coordinated with MTBLW staff to make minor modifications to the existing well water distribution piping to allow a small flow to be diverted from the well's main supply pipe to the water treatment pilot test skid. The MTBLW staff also assisted with the required plumbing to direct the treated water (test skid discharge) to be conveyed to the water discharge location.

On April 21, 2020, GSI and AqueoUS Vets® filled the columns with well water to soak the GAC and IX beds and remove air. The media was left to soak overnight. The skid was covered with fabric and opaque polyethylene sheeting to reduce light exposure and protect the instruments.

On April 22, 2020, GSI and AqueoUS Vets® backflushed the GAC columns. This was accomplished by isolating the IX columns (closing the valves above the IX columns) and gently flowing well water up through the GAC columns, suspending the GAC beds and removing fines from the media. This flushing was conducted intermittently until no more fines were observed to be flowing out of the sample ports for the columns. During this operation, some of the GAC particles floated within the columns and flowed out of the columns. After completing the flushing, the carbon bed heights in the columns had changed because some of the GAC appeared to have flowed out of the AV1240LDX and F400 columns during the flushing. GAC was vacuumed out of the AV1240PFAS column where it appeared that GAC may have been transferred over from the F400 column. Additional AV1240LDX and F400 GAC was added to the respective columns to meet the column height design criterion and equalize the GAC column heights. Ultimately, all the GAC columns were at uniform height at the completion of this startup effort.

Upon reopening the flow valves above the IX resin columns following backflush of the GAC, some residual GAC trapped in the piping header allowed GAC particles to flow onto the top of the IX resin columns. This deposited a small layer (less than one inch) of GAC onto the surface of the IX resin columns. To address this, the water was drained from the IX columns and the layer of GAC was vacuumed off the top of the IX columns. The columns were clear plastic, so this was accomplished by visual inspection. Then, the PSR2 Plus column was supplemented with additional IX resin to achieve the specified design height. All the columns were filled with water and again soaked overnight. During the initial IX fill, some of the resin beads floated to the surface (refer to **Appendix B** Photolog, Photo 2). After soaking overnight, the floating beads settled into the column. Prior to starting the test, GSI verified uniform height for the four columns.

On April 24, 2020, GSI returned to the site for system startup. The flow rates were adjusted to the design flow rate and flow and pressure parameters were documented on a site visit checklist and log. This checklist/log was used by GSI and the MTBLW staff to ensure consistent data collection. Initial baseline samples were collected on this date.

3.2 Test Skid Monitoring, Sampling, and Analysis

GSI visited the MTBLW Well #7 site weekly for monitoring and water sample collection for approximately the first six months of operation. Due to the very slow PFAS breakthrough across the test columns, the monitoring/sampling interval was extended to once every two weeks starting October 22, 2020. Similarly, the monitoring/sampling interval was switched to once every three weeks starting December 17, 2020, and ultimately monthly starting January 27, 2021. Throughout the pilot test, the monitoring/sampling schedule was also adjusted slightly depending on well shutdown periods. **Table 1** includes a summary of sample collection dates and sample analyses. MTBLW staff visited the pilot test sites daily to verify operation and briefly document the system parameters.

During each of the weekly facility visits from system startup through September 17, 2020, GSI collected one influent sample of the untreated water and either an effluent or “midpoint” sample from each of the eight treatment columns. Interior column samples were collected at approximately half of the bed volume for GAC columns and one third of the bed volume for IX columns and are referred to as “midpoint” samples throughout the remainder of this report. Samples were collected at each sampling port using the following sampling procedure:

- Nitrile gloves were donned. No waterproof clothing or boots were worn during sampling.
- The sample ports were purged for several seconds to remove stagnant water.
- Laboratory-provided sample bottles with Trizma preservative were slowly filled.
- Sample bottles were placed in laboratory-provided zip-loc bags and then into an iced cooler. Wet ice was also placed in zip-loc bags prior to placement into the coolers to prevent liquid contact with the sample bags.
- Samples were transported to a California Environmental Laboratory Accreditation Program (ELAP) certified laboratory, Eurofins Eaton Analytical in Monrovia, California under chain-of-custody procedures.

At the start of the test, an initial influent sample was analyzed for the parameters listed below, providing initial baseline water quality. To detect changes to MTBLW Well #7 water quality over the entire test duration, influent samples were also collected monthly and analyzed for this same full analyte list (see table below). The list of analytes for the more frequent influent, effluent, and QC sampling is also provided below. At the request of DDW (DDW/WRD meeting on July 8, 2020), additional sampling and analysis was conducted for bacteria during the pilot study. The laboratory reports are provided in **Appendix C**.

**Baseline Water Quality Parameters
 (collected monthly)**

Analyte	Analytical Method
PFAS	EPA 537.1
Sulfate	EPA 300.0
Nitrate	EPA 300.0
Alkalinity	SM 2320B
Chloride	EPA 300.0
Uranium	EPA 200.8
Perchlorate	EPA 314.0
Total Arsenic	EPA 200.8
Dissolved Hexavalent Chromium	EPA 218.6
Total Iron	EPA 200.7
Total Manganese	EPA 200.8
Total Sodium	EPA 200.7
Total Potassium	EPA 200.7
Calcium	EPA 200.7
Total Magnesium	EPA 200.7
pH	Field Meter
Oxidation-Reduction Potential	Field Meter
Total Dissolved Solids (TDS)	E160.1 / SM 2540C
Total Suspended Solids	SM 2540D
Oil & Grease	EPA 1664
Total Organic Carbon	SM 5310C
Volatile Organic Compounds (VOCs)	EPA 524.2

**Influent, Effluent, and Quality Control Analytical Parameters
(collected on specified intervals)**

Analyte	Analytical Method
PFAS	EPA 537.1
Sulfate	EPA 300.0
Nitrate	EPA 300.0
Alkalinity	SM 2320B
Chloride	EPA 300.0
pH	Field Meter
Total Organic Carbon	SM 5310C

3.2.1 Field Quality Control

Water sample duplicates for PFAS influent samples were collected periodically for field quality control purposes. As a cost savings measure, the collection and analysis of these field duplicates was discontinued approximately three months after test startup because the first three months' results meet the quality objectives. The field duplicates had demonstrated consistently acceptable relative percent differences (RPD) between the primary and duplicate samples.

Field blanks for PFAS were also collected using laboratory-supplied water to confirm that field sampling procedures and laboratory analysis procedures did not introduce sources of contamination. After collection of twelve field blanks over approximately three months, collection and analysis of field blanks was discontinued due to no detections observed in any field blank samples.

3.3 Inspections, Tuning, Maintenance and Troubleshooting

During implementation of the pilot test, frequent inspections, tuning, maintenance, and troubleshooting were conducted to ensure effective operation of the test skid. These items included routine flowrate adjustments, filter changes, cleaning and prevention measures for algae growth, and pilot system maintenance during prolonged shutdowns.

3.3.1 Routine Flowrate Adjustments

During each facility visit, flowrates through each column were recorded. Direct read flowmeters (rotameters) were installed on each column so that the flowrate could be adjusted and tuned. If flowrates were not within 0.05 gpm of the design rate through GAC columns or 0.1 gpm of the design rate through IX columns, then flows were adjusted using the flow control valves underneath each column.

The total flow volume can be calculated using two different readings: One using an electronic totalizer/flowmeter installed on one of four columns (GAC or IX) and the other using a mechanical flowmeter (rotameter) installed on each column. Following the first month of operation, it was determined that using the readings from a flowmeter installed on each column was more dependable method for total flow volume calculation. The electronic totalizer/flowmeters were observed to report lower totalized flow than the computed total flow from the acrylic mechanical flowmeter readings. The electronic totalizer/flowmeters were taken apart and cleaned, but the

issue was not fixed. Later, it was determined that resetting the totalizers every week would improve the discrepancy between two different readings.

3.3.2 Filter Replacement

The 10-inch x 4.5-inch, 5-micron sediment cartridge filter on the influent side of the pilot skid was first replaced on June 23, 2020, approximately two months after system start-up. During this first replacement, a heavy sediment build-up was observed on the cartridge filter. Cartridge filter replacement was subsequently placed on a monthly schedule for the duration of pilot test to prevent heavy buildup of sediment and subsequent delivery pressure degradation.

3.3.3 Algae Growth

On June 9, 2020, possible algae growth (spotty discoloration) was observed on a small, localized portion of the PFA694E ion exchange resin column even though the pilot test skid was covered with the plastic and fabric sheets (refer to **Appendix B** Photolog, Photo 3). To address this, an additional sunlight protection measure was implemented: the GAC and IX media columns were covered with aluminum foil to block the light and prevent algae growth. Approximately once per month, the aluminum foil was removed to check for the presence of algae in GAC or IX columns and to document the color of IX resin. Following inspection, aluminum foil was reapplied to each column (refer to **Appendix B** Photolog, Photo 5). No additional growth of the suspected algae was observed in the PFA694E column throughout the remainder of the pilot test.

On June 16, 2020, algae growth was first observed in the PFA694E ion exchange rotameter-style flowmeter (refer to **Appendix B** Photolog, Photo 4). For the pilot test duration whenever additional algae growth was observed, each of the flowmeters was disassembled and cleaned using a soft brush. Flowmeters were also covered with aluminum foil to prevent light penetration. On August 6, 2020, the flowmeters were covered with blackout fabric for greater protection from light. The fabric was very successful in preventing additional algae growth in the flowmeters throughout the duration of the pilot test.

Although small growths of algae were observed during pilot test, it was not considered to have an impact on the pilot test results. The observed algae occurred in small, localized films and was not observed to be growing within the media, but solely at the interface between the media the plastic column walls.

3.4 Pilot Test Duration

Key performance measurements for the pilot test were influent and effluent PFAS concentrations (with a primary focus on PFOA and PFOS) and time to breakthrough (on a bed volume basis) for each PFAS analyte. The initial planned duration of the pilot test was 26 weeks. The objective was to run the test until the PFOA or PFOS concentration achieved 50% breakthrough (treated concentration divided by initial concentration or C/C_0) or until the PFOA or PFOS concentration reached their respective RLs.

However, after approximately six months of operation, the GAC and IX media performed very well and the PFOA and PFOS breakthrough was insufficient to meet these objectives. Due to the extended time for PFAS breakthrough for several of the media and to obtain some early insight as to how the media was performing, it was decided that midpoint (mid-column) samples would be collected on a monthly basis beginning June 30, 2020. Note that for the GAC, this sample port was located approximately in the middle of the column while on the IX columns, this sample port was located approximately one-third down the column length, representing approximately 33% of the column length. The results from the midpoint samples provided information on the rate of PFAS breakthrough within each column so that the overall duration of the pilot test could

be better estimated, and the water sampling schedule could be modified for increased cost effectiveness.

In coordination with WRD, the pilot test was ultimately extended to April 22, 2021, a total of approximately 12 months. During this time, approximately 52,000 bed volumes were treated through each of the GAC columns and approximately 407,000 bed volumes were treated through each of the IX columns.

4.0 PILOT TEST RESULTS

In this section, the pilot test field observations, the influent chemistry, the GAC and IX removal performance for PFOA and PFOS, the removal performance for other PFAS, and finally, data validation and usability are addressed.

4.1 Pilot Test Field Observations

For the duration of the MTBLW Well #7 pilot test, the well delivery pressure generally stayed in a narrow delivery pressure between 62 to 66 psi. This is important as the test skid flow control valves function by restricting flow. Highly variable pressures would create difficulty in setting and maintaining a consistent delivery flowrate to each column. MTBLW Well #7 also ran consistently throughout the pilot test, with only an approximate four-day shutdown period for scheduled maintenance in February 2021. The stability of the well pressures and operation schedule resulted in a reliable pilot test operation.

MTBLW Well #7 water contained some fine sand that caused the need for monthly cartridge filter replacement on the pilot skid influent. In addition, some algae was observed in the flowmeters, but significant algae growth was not observed in the media. The consistent well operation (consistent flow) likely reduced algae growth by minimizing periods of stagnant water in the system.

The GAC and IX resin bed heights did not change throughout the pilot test, indicating that little settling of the media occurred after the system startup and a consistent bed volume was maintained.

Influent PFAS and Background Chemistry

Influent PFAS and background chemistry constituents were measured on a weekly and/or monthly basis during the pilot study. The following table summarizes the concentration ranges of PFAS in MTBLW Well #7 influent water.

MTBLW Well #7 Influent PFAS Concentration Summary

Compound		Influent Concentration (ng/L)		
Full name	Abbreviation	Min.	Max.	Avg.
Perfluorooctanoic acid	PFOA	14	17	14.9
Perfluorooctanesulfonic acid	PFOS	32	43	36.2
Perfluorohexanesulfonic acid	PFHxS	5.9	7.2	6.5
Perfluorobutanesulfonic acid	PFBS	7.6	10	9.0
Perfluorohexanoic acid	PFHxA	3.5	7	5.0
Perfluoroheptanoic acid	PFHpA	2.6	4.9	3.6
Perfluorononanoic acid	PFNA	3.3	4	3.6
Perfluorodecanoic acid	PFDA	<2.0	2.1	0.7

Notes

The anomalous results from 5/19/2020 were not included in calculating the average concentrations.

For PFAS with non-detect results, 0 was substituted for the calculation of the average concentration.

The water background chemistry established with the baseline water quality sampling was stable throughout the pilot test duration. The key background chemistry parameters that were measured on a weekly basis included:

- Nitrate (as nitrate), which varied between 9.9 and 12 mg/L;
- Sulfate, which varied between 71 to 84 mg/L,
- Dissolved organic carbon (DOC) between 0.7 and 1.3 mg/L; and
- TOC, which varied between 0.6 to 1.3 mg/L.

The full set of these data are presented in **Table 2**.

Additional background chemistry parameters were monitored on a monthly basis during the pilot study. Out of these parameters that were monitored monthly, some influent characteristics are listed below:

- The water had elevated total hardness that was consistently above 200 mg/L as CaCO₃;
- Iron concentrations were below detection (<0.020 mg/L) except for the first sampling event during the pilot test;
- VOCs as measured by United States Environmental Protection Agency (EPA) Method 524.2 were non-detect before and during the pilot test; and
- Concentrations of oil & grease (hexane extractable material) were measured during the pilot test ranging from non-detect (<0.95 mg/L) to 3.91 mg/L.

The full set of these data are presented in **Table 3**.

4.2 PFOA and PFOS Removal Performance

GAC and IX resin breakthrough curves for PFOA and PFOS are presented in **Figures 4 and 5** and **Figures 6 and 7**, respectively. The breakthrough curve plots show the effluent concentration of either PFOA or PFOS in ng/L on the primary y-axis as a function of the bed volumes (BVs) treated on the primary x-axis. A blue line represents the volume of water treated, which is shown on the secondary y-axis. A secondary x-axis shows the operational time equivalent to bed volumes treated in months.

A recent report by Jacobs Engineering Group, Inc. (Jacobs), in partnership with Orange County Water District (OCWD), suggests that selecting 60% of the influent concentration (or the analyte RL, whichever is lower) as the breakthrough criterion, rather than 50%, is more optimal and economical for triggering lead vessel media replacement in a lead-lag adsorption treatment system (Jacobs, 2021). To allow for comparison with that study, in addition to the RL, the data from the current pilot study are also discussed using the additional breakthrough criterion of 60% of the influent concentration (8.9 ng/L for PFOA and 21.7 ng/L for PFOS).

Over the course of the pilot study, PFOS concentrations did not exceed the RL of 40 ng/L or 60% of the influent concentration in the effluent or midpoint samples for any of the GAC or IX columns (**Figures 5 and 7**). Therefore, in all cases, the effluent PFOA concentration controls the timing of GAC or IX media changeout.

Due to better than anticipated performance, many of the media had not broken through by the completion of the pilot test. To address this and help WRD and the pumpers at MTBLW make decisions regarding choice of adsorbent media for removing PFAS from water, breakthrough curves for PFOA were linearly extrapolated out to the RL (**Figures 8 and 9**). This method of bed life estimation provides an additional level of conservatism because the breakthrough curve slope should have a shallower slope as it approaches the influent concentration. This means that a linear extrapolation of the breakthrough curve would intercept the RL in fewer BVs than the actual curve, if the pilot were allowed to operate to complete breakthrough. A summary of the time for PFOA to breakthrough GAC and IX is presented in the below table.

MTBLW Well #7 Breakthrough Summary

Media	Estimated Breakthrough Time for PFOA in Bed Volumes	
	RL	60% of Influent Concentration
Granular Activated Carbon		
F400	54,000*	51,000*
AV1240LDX	41,400	40,800
AV1240CB	40,500	32,700
AV1240PFAS	33,900	31,800
Ion-Exchange Resin		
PSR2 Plus	675,000*	610,000*
SIR-110-HP	520,000*	490,000*
PFCR-2	500,000*	460,000*
PFA694E	380,500	350,800

Notes

All breakthrough times were determined by linear interpolation of effluent concentrations unless otherwise noted.

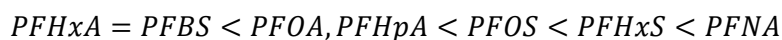
* Breakthrough time was linearly extrapolated from incomplete breakthrough curves out to the RL or 60% criteria.

Overall, the F400 and PSR2 Plus had the longest bed lives of all GACs and IX resins tested, respectively.

4.3 Removal of Other PFAS

The breakthrough order for PFAS generally followed chain length within the perfluorocarboxylic acid and perfluorosulfonic acid groups for both GAC and IX, with shorter chain PFAS breaking through first.

For GAC columns, PFAS initial breakthrough times generally followed the order for most media:



Time to breakthrough for PFBS and PFHxA were similar for the activated carbons (between 15,000 and 25,000 BVs). Perfluorosulfonic acids typically broke through the activated carbon columns later than the perfluorocarboxylic acids. For PFOA and PFHpA breakthrough order between the two compounds varied between individual GACs.

For IX columns, PFAS initial breakthrough times generally followed the order:



The IX columns retained perfluorosulfonic acids, including the short-chain PFBS, considerably better than GAC relative to perfluorocarboxylic acids. While PFBS and PFHxA had similar times to breakthrough on GAC, elevated concentrations of PFBS were not measured in IX column midpoint samples until slightly before PFOA started being detectable in the column effluents.

Breakthrough curves for other PFAS are presented in **Appendix D**. Midpoint and effluent concentrations are presented in **Table 4** for GAC columns and **Table 5** for IX columns.

4.4 Bacterial Testing

Influent and effluent water from the pilot test skid was analyzed for fecal indicator bacteria including *E. coli* and total coliforms to ensure bacteria were not colonizing on the media columns. Neither *E. coli* nor total coliforms were present in influent or effluent samples measured in the middle of the test (August 30, 2020). The results of this sampling are presented in **Table 6**.

4.5 Data Validation

All PFAS analytical results were evaluated and validated using the *Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using EPA Method 537* published by USEPA in November 2018. Nearly all samples met the criteria for PFAS analyses contained within this document and no results were qualified except for several results for the influent sample from May 19, 2020. Due to the anomalously low values within this set of data compared with the larger data set, these data were excluded from plots and calculations.

The results of all other inorganic and organic analyses conducted during this study were evaluated and validated using the *National Functional Guidelines for Inorganic Superfund Method Data Review* and the *National Functional Guidelines for Organic Superfund Methods Data Review*. During this process, several influent sample results were qualified. Results for alkalinity and total suspended solids samples collected on March 25, 2021, were qualified for being analyzed outside of holding times. The result for a total arsenic sample collected on March 25, 2021, was qualified due to detection of the analyte in the method blank. Neither of these data qualifications affected the usability of the data. A complete description of the data validation and usability assessment is presented in **Appendix E**.

5.0 DATA EVALUATION AND DISCUSSION

5.1 Pilot System Operation

There were no significant operational differences between the GAC and IX pilot system column operations. No media type appeared distinctly susceptible to algae growth or other biofouling.

5.2 PFAS Pilot System Removal Performance

Due to better than anticipated PFAS removal performance by the tested media, an optimal performing media, with respect to PFOA adsorption capacity, could not be confirmed for MTBLW Well #7. However, using midpoint sample results, overall PFAS removal behavior, and breakthrough curve behavior, better performing media were identified.

Because of the differences in the RLs between PFOA and PFOS, and their relative concentrations in the MTBLW Well #7 water, PFOA is the primary driver for media changeout frequency. Typical influent concentrations for PFOA ranged between 14 and 17 ng/L at this site, which puts the water above the 10 ng/L RL. For the first half of the pilot study, PFOS concentrations in the influent were below its RL of 40 ng/L but increased to around 42 ng/L for the majority of the second half. The choice of using the RL as the changeout trigger as opposed to a different threshold (e.g., NL or 60% of influent concentration) was made based on discussions with treatment system vendors and the results of the lead-lag performance modeling conducted by Jacobs as part of the OCWD PFAS Treatment Testing Study. Based on the performance modeling results, the concentration in the lag vessel effluent was non-detect (<2 ng/L) when using a changeout target of 60% of the influent concentration (11.1 ng/L) for the lead vessel effluent (Jacobs, 2021). Their model results show that the effluent concentration of PFOA did not reach 2 ng/L until the lead vessel effluent reached 84% of the influent concentration. Because both the influent loading and changeout trigger for the modeled scenario were higher than those from the current pilot study, it suggests that using the RL as a changeout trigger for MTBLW Water Well #7 is sufficient to prevent the breakthrough in the effluent reactor above the currently PFOA detection level of 2 ng/L.

As previously mentioned, one of the limitations of this study was the inability to observe PFOA and PFOS at the respective RL in the column effluents of most media tested. To overcome this, linear extrapolation of the breakthrough curves was used to predict bed life using the PFOA RL criterion.

5.3 Contact Time

Because of the need to limit the duration of the test for budgetary reasons, the EBCT of the IX columns was reduced from the manufacturer recommended 2.5 minutes down to 1.2 minutes. Generally, increasing EBCT causes improved removal performance due to longer contact time between the media and the contaminated water. To our knowledge, no publicly available research has carefully examined how contact time impacts overall removal of PFAS by IX resin. Our results showed improved PFOA bed capacity for the PSR2 Plus and PFA694E resins compared with those reported by OCWD, however it is unclear how much of that is attributable to influent water chemistry or contact time. To truly optimize an IX treatment system using one of the media tested in this study, additional pilot testing for a longer duration would be required. In terms of the life cycle costs developed in Section 6, sensitivity analysis was used to determine how sensitive life cycle costs would be to perturbations in the estimated bed lives.

5.4 Granular Activated Carbon

Of the four tested activated carbons, the Calgon F400 lasted the longest in terms of time to breakthrough at the RL of 10 ng/L.

PFOA was detected in GAC column effluents earlier than PFOS, despite having a lower loading concentration in the influent water. This indicates that PFOS has a higher affinity for the GAC adsorption than PFOA.

While the effects of TOC and DOC in source water were not quantified during this study, it is anticipated that the presence of approximately 1 mg/L of TOC/DOC in the source water likely impacted removal of PFAS by GAC. GAC has been used for decades as a unit process to remove total and dissolved organic carbon from drinking water to improve characteristics such as odor and taste. Because the concentrations of TOC/DOC and PFAS in the source water differ considerably (approximately 100,000 times more TOC/DOC than PFAS), it is to be expected that some of GAC adsorption capacity would be taken up by organic carbon which would reduce the total mass of PFAS that could be removed. Higher TOC/DOC concentrations would likely reduce the bed lives for the GACs that were observed during the pilot test while lower concentrations would likely have the opposite effect.

When considering the suite of PFAS that were measured using EPA Method 537.1, removal capacity of PFAS by the GAC products tended to follow the same observed patterns that have been observed in other studies (Liu et al., 2019):

- The perfluorocarboxylic acids typically broke through before the perfluorosulfonic acids; and
- Within each type, GAC tended to retain longer-chain PFAS better than shorter-chain PFAS.

5.5 Ion-Exchange Resin

Despite elevated sulfate concentrations in influent water, PFOA concentrations only exceeded the response level in the effluent for one of the tested IX resins, PFA694E. While not confirmed by this pilot study, based on early breakthrough curve behavior, the PSR2 Plus IX resin appears to have the largest PFOA removal capacity of the four IX resins. Of all the tested media, PSR2 Plus is likely the longest lasting. While PSR2 Plus had the second soonest initial breakthrough time for PFOA at approximately 225,000 BVs, its early breakthrough behavior has the shallowest slope. Additional test duration would be needed to confirm which IX resin ultimately has the best PFOA removal performance for MTBLW Well #7.

Chromatographic peaking of PFOA was observed for the IX resins wherein the effluent concentration increased above the concentration in the influent. This suggests that PFOA is desorbing from the IX resin and being replaced with other compounds that have higher affinities for adsorption than PFOA, such as PFOS or other anions (e.g., sulfate). This means that while PFOA is the primary driver for media changeout frequency, the full suite of water constituents that may affect PFOA adsorption behavior must be considered as well.

5.5.1 Competing Ions

Elevated sulfate concentrations had a lesser impact on PFAS removal by the IX resins than anticipated. MTBLW Well #7 was chosen in part due to relatively high sulfate loadings of 78 to 84 mg/L, which were anticipated to help shorten the pilot duration and provide data to reflect a “worst case scenario” in terms of competing ions. While effluent samples from this study were not analyzed for general water quality constituents, other studies have considered the potential for competition between PFAS and inorganic ions for adsorption on IX resin. During the OCWD pilot, that PSR2 Plus did not significantly remove sulfate at similar influent concentrations to those found in the current study (about 2% of influent sulfate mass) (Jacobs, 2021). However, not all IX resins behaved this way. The investigators also observed that ECT2 SORBIX IC4 and Purolite

PFA694E (also used in the current study) significantly removed sulfate initially during the pilot test (approximately 27% and 17% of influent sulfate mass, respectively) (Jacobs, 2021). Based on these observations, it is unlikely that sulfate impacted PFAS removal performance by PSR2 Plus but suggests that it likely affected PFA694E performance, which was the IX resin that most rapidly broke through with respect to PFOA.

The source water for this pilot test additionally contained nitrate in the range of 9.9 to 12 mg/L as nitrate. The OCWD pilot study source water contained lower levels of nitrate (2.21 mg/L), and found that all tested IX resins, including PSR2 Plus, removed nitrate down to effluent concentrations of approximately 0.05 mg/L at the start of the study (Jacobs, 2021). The presence of nitrate in the source water for the current study may have reduced IX resin capacity for PFAS and consequently reduced the time to breakthrough.

The observations from the OCWD pilot study coupled with the results of this study suggest that PSR2 Plus can remove PFAS even in the presence of elevated sulfate concentrations and confirms the importance of considering the potential effects of competing anions on the performance of IX resins when evaluating treatment alternatives as some resins may have been impacted by competing ions.

5.5.2 Comparison of Pilot Results with Vendor Models

The results generated by this study were deemed too incomplete due to insufficient test time for meaningful comparison with vendor IX breakthrough models.

6.0 LIFE CYCLE COST ANALYSIS

Life cycle cost analysis (LCCA) for the GAC and IX alternatives was conducted to provide information on the cost-effectiveness of the tested GAC and IX medias. Life cycle costs include both yearly O&M costs and initial capital costs to purchase and construct the treatment systems. Capital costs include the treatment skid(s), initial media fill, and installation fees (Equipment and Installation Capital Costs) but does not include site-specific work such as site work, yard piping, foundations, additional process equipment (prefiltration, backwash tank, etc.), total installation costs for site, electrical, instrumentation & control, general conditions, overhead, contractor profit, bonds and insurance, engineering and permitting, and contingency. Capital costs are presented as 2021 costs and are not escalated. O&M costs consist of media changeouts, including both the cost of new media and disposal of spent media, and annual pumping costs (increase in electricity cost) in excess of baseline that are associated with differential head loss between GAC and IX systems. Cash flows were developed that included O&M costs at the end of the year in which they were incurred. We applied a 5% discount rate and a 3% inflation rate and assumed a 20-year operational period. For comparison, the cash flows for each treatment approach are shown as net present value (NPV) costs. Using this approach, we can compare all tested media. Detailed discussion was only provided for the two most cost-effective GACs (F400 and AV1240LDX) and the two most cost-effective IX resins (PSR2 Plus and PFCR-2). Additional assumptions used in the analysis are presented in the following section.

6.1 Assumptions

The following assumptions and included rationale were used to develop our estimates:

1. The alternatives were evaluated over a 20-year lifetime;
2. A 5% discount rate (and a 3% inflation rate was applied to the cash flow);
3. A 10% tax rate was applied to the cost of equipment and virgin media;

4. Each alternative was assumed to treat the same volume of water over the 20-year lifetime;
5. Costs were applied at the end of the year in which they were incurred with capital costs being incurred at end of year 0;
6. Treatment system vessels would be setup in a lead-lag configuration to allow for the maximum utilization of the lead vessel media prior to changeout;
7. GAC and IX media changeouts would occur at PFOA RL breakthrough in the lead vessel and not on a predetermined basis;
8. Full-scale systems would incorporate bag filter pretreatment for sediment removal, similar to that which was used during the pilot testing to remove sediment;
9. Flowrates and EBCT would conform with manufacturers' specifications in full-scale treatment systems;
10. Certain costs that were assumed to be equal between GAC and IX system alternatives were excluded from the LCCA and include site-specific work such as site work, yard piping, foundations, additional process equipment (prefiltration, etc.), total installation costs for site, electrical, instrumentation & control, general conditions, overhead, contractor profit, bonds and insurance, engineering and permitting, and contingency;
11. IX resin is assumed to require landfill disposal (incineration would increase disposal costs);
12. GAC is assumed to be reactivated by the manufacturer and returned to site for reuse;
13. Backwashing during bed operation is not vendor recommended and was not included in the analysis;
14. Freight costs for new media were not included in the LCCA; and
15. To account for differences in head loss through the pressure vessels for the GAC and IX systems, estimates of differential pumping costs (provided by AqueoUS Vets) are included in the LCCA.

6.1.1 Effect of Influent Water Quality on Cost Estimation

Adsorbent media bed life will vary between different water sources depending on contaminant loading and background water chemistry. The influent source water used in the pilot testing was simultaneously distributed to each media type such that influent concentrations of all constituents were the same for all media types and are not expected to have disproportionately impacted the relative efficiencies between the different media types. General best operational practices would be to pretreat the water for total suspended solids (TSS) and other interfering compounds (e.g., oil and grease) to the extent feasible prior to passing water through the GAC or IX vessels; however, this pretreatment was not included in the life cycle cost estimates. GAC is capable of treating most organic co-contaminants that may be present, with the primary impact being increased GAC consumption, which may require more frequent change-outs. Also, anions such as nitrate and sulfate can compete for ion exchange sites on the resins even though the resins are selective towards PFAS. Therefore, the influent concentrations of these will affect change-out frequency.

6.2 Full-Scale System Design

The below table summarizes design parameters for the full-scale GAC and IX treatment system alternatives:

Full-Scale Conditions

Items	GAC	IX	Units
Train Flow Rate	750	1,500	gpm
Number of Trains	2	1	none
Vessel Diameter	12	12	feet
Bed Volume	1,003	501	ft ³
Vessel Cross-Sectional Area	113	113	square feet (ft ²)
Treatment Skid Footprint	380	395	ft ² /skid
Total Adsorption Treatment System Footprint	760	395	ft ²
Bed Depth	8.9	4.4	feet
Surface Loading Rate	6.6	13.3	gpm/ft ²
EBCT	10	2.5	minutes
Treated Volume per Day	2,160,000	2,160,000	gallon

Notes

Each train is comprised of two (2) 125 PSI ASME code adsorbers with interconnecting pipe and additional fittings and connectors including: two graphite rupture disks per system for pressure relief, 8-inch carbon steel ring header and 8-inch carbon steel manifold (GAC) or 10-inch carbon steel manifold (IX), nine wafer-style butterfly valves with cast iron body and nylon coated ductile iron disc, and a 316 stainless steel four-point upper distributor included in each adsorber (IX only).

6.3 Capital Costs

6.3.1 Spatial Requirements

GAC systems require lower surface loading rates and higher EBCT compared to IX systems (e.g., 10 vs 2.5 minutes). This means that in terms of treatment skids, for a given design flowrate, more GAC treatment skids are needed. Overall, this results in a treatment system footprint for GAC treatment that is typically larger than for IX treatment. For a full-scale design flowrate of 1,500 gpm the GAC and IX treatment alternatives have the following footprint requirements:

- The GAC treatment system has a footprint of 760 ft² (two skids are required, each with a footprint of 380 ft²); and
- The IX treatment system has a footprint of 395 ft² (one skid is required).

The above footprint estimates only account for the treatment skid area and do not include additional space required for specific treatment system arrangements and other required system components such as prefiltration or backwash facilities. GAC systems also have an overall height of approximately 19 feet compared to an approximately 16-foot IX system height, which could have implications for indoor or residential treatment areas. In crowded residential neighborhoods, space restrictions and aesthetic considerations can make a more compact, longer-running resin-based system more desirable.

6.3.2 Cost of Initial Media

The following media costs were considered during the life cycle cost evaluation. When evaluating carbon cost, it is important to assess the cost per cubic foot (ft³) and not the price per pound (lb). Each carbon has a different apparent density. The EBCT is measured using carbon volume, not weight. The budgetary cost per cubic foot is provided in the tables below.

GAC Products

Media	Apparent Density (lbs/ ft ³)	Cost (\$ per lb)	Cost (\$ per ft ³)
AV1240	31.2	\$1.65	\$51.48
AV1240LDX	25	\$1.55	\$38.75
AV1240PFAS	28.7	\$1.90	\$52.82
F400	33.7	\$1.75	\$58.98

IX Products

Media	Apparent Density (lbs/ ft ³)	Cost (\$ per lb)	Cost (\$ per ft ³)
PSR2 Plus	43	\$6.40	\$275.00
SIR-110-HP	41	\$7.56	\$310.00
PFA694E	42	\$6.55	\$275.00
PFCR-2	42	\$5.60	\$235.00

6.3.3 Treatment System Components and Installation

Below is a summary of estimated capital costs for the two best performing GACs and IX resins that were used in the LCCA:

Item	F400 GAC	AV1240LDX GAC	PSR2 Plus IX Resin	PFCR-2 IX Resin
Skid Cost (lead-lag) ¹	\$977,000	\$977,000	\$465,000	\$465,000
Total Initial Media Cost (Unit Cost)	\$390,000 ² (\$58.98/ft ³)	\$257,200 ² (\$38.75/ft ³)	\$304,000 ³ (\$275.00/ft ³)	\$260,000 ³ (\$235.00/ft ³)
Installation Cost	\$9,000	\$9,000	\$9,000	\$9,000
Total Equipment and Installation Capital Cost	\$1,377,000	\$1,243,000	\$777,000	\$733,000

Notes

1. GAC alternatives require two skids (\$488,000/skid including tax) while IX alternatives require one skid.
2. Includes enough GAC to fill the two vessels on each skid (4 loads) to the design bed height plus “swing” loads (2 loads) of GAC to be warehoused, used for changeouts, and reactivated.
3. Includes enough IX to fill the two vessels on each skid to the design bed height. Costs include a 10% sales tax rate on equipment and initial media purchase. Excludes freight costs.

The above does not include costs for drinking water distribution system tie-ins or other construction costs. The equipment and installation capital costs are simply costs to set the treatment equipment and make minor plumbing connections. Additionally, the above tables include two “swing” loads of GAC because the GAC is assumed to be reactivated by the manufacturer. This means the capital costs include enough GAC to initially fill all treatment vessels (four loads) to their design bed heights plus two loads of GAC that can be warehoused and used for the changeout of the lead vessels. This is further discussed in Section 6.4.4.

6.4 Operations and Maintenance Costs

LCCA was conducted for all tested media, but only the two best performing media of each type, which were the F400 and AV1240LDX GACs and the PSR2 Plus and PFCR-2 IX resins, are discussed in detail. The following sections describe the costs that make up the O&M costs included in the LCCA.

6.4.1 Media Bed Life and Changeout Frequency

The LCCA assumes that media changeouts would occur when the PFOA concentration in the lead vessel exceeded the RL of 10 ng/L. This would maximize the media efficiency - in this case, the IX resins all have bed lives greater than 12 months. While it is possible that pump operations may require more frequent changeouts (e.g., once per year), this scenario was not considered in the LCCA.

Because the PFOA RL is currently the most stringent PFAS guidance criteria for drinking water in California and the relative affinity of PFOA for removal by adsorption, PFOA breakthrough was

determined to be the primary driver for media changeouts. Although PFOS was present in influent water at higher concentrations than PFOA, PFOS did not reach effluent concentrations exceeding the current RL of 40 ng/L during the pilot test. The PFBS response level was recently established at 500 ng/L, which is significantly higher than the influent concentration of PFBS. Other PFAS, including PFHxS, PFHpA, and PFNA, which do not yet have some guidance, notification, or proposed MCL concentrations in California, had a variety of breakthrough times, some of which were earlier or later than that of PFOA. In general, shorter chain PFAS have lower GAC loading capacities and faster breakthrough times than the longer-chain PFAS such as PFOA and PFOS. GAC can also be used as pretreatment to remove non-PFAS organics and longer-chain PFAS, followed by IX to remove short-chain PFAS, should removal of short-chain PFAS become an important regulatory consideration in the future.

Because of better than anticipated performance and limitations on overall pilot test duration, media bed life estimates contain some assumptions that should be considered:

- For media that did not reach PFOA RL concentrations in the column effluent before the end of the pilot study, extrapolation of effluent concentration trend was used for bed life estimation;
- EBCT differences between the IX pilot and the proposed full-scale system (1.2 vs. 2.5 minutes) are assumed to not affect overall breakthrough behavior and bed life; and
- The bed lives previously described in Section 5.2 were used to estimate full-scale performance for the purposes of the LCCA.

Costs for media changeout were applied at the end of the years in which they are anticipated to occur based on the estimated full-scale bed life.

6.4.2 Energy Costs

Estimates of the energy costs for pumping associated with media vessel were provided by AqueoUS Vets. These costs were developed under the following assumptions:

- Flow rates of 750 and 1,500 gpm for the GAC and IX treatment skids, respectively;
- Pump motor efficiencies of 75%;
- Energy cost of \$0.08 per kilowatt-hour (kWh);
- Demand cost of \$10 per kilowatt (kW) per month;
- Pump operating time of 24 hours per day;
- Differential head loss of 23 ft of water (9.8 psi) between IX and GAC treatment trains; and
- The annual energy costs are based solely on head loss only and do not reflect actual pumping costs.

Annual pumping costs related to media vessel head loss are:

- \$2,100/GAC treatment skid X 2 GAC treatment skids = \$4,200; and
- \$11,300/IX treatment skid X 1 IX treatment skid = \$11,300.

These costs were applied at the end of each year.

6.4.3 Media Disposal Costs

Typical spent media handling consists of regeneration, incineration, or land disposal.

Regeneration of adsorbent media is the process of removing contaminants from the media by the use of extreme temperatures, solvents, or brine solutions, so that the media may be reused for

additional treatment. All IX resins used in this study are marketed as “single use” and are not intended for regeneration. Thermal regeneration (reactivation) is commonly applied to activated carbons. For the purposes of the LCCA, the cost of reactivation, storage of a “swing” load of GAC to be used in changeouts, freight, and service is assumed to be approximately 70% the cost of virgin GAC. Certain vendors including Calgon Carbon are currently reactivating GAC; however, as PFAS waste management becomes more highly regulated, there is the possibility that reactivation facilities may be challenged to meet PFAS air emissions and PFAS destruction requirements.

Incineration is a thermal waste treatment process that destroys substances by combustion. Incineration carries the risk of incomplete combustion and by-product generation (Stoiber et al., 2020). While incineration is relatively more common in the eastern United States, relatively few facilities are located near the west coast. The incineration facility that is located closest to the Los Angeles area is in Aragonite Incineration Facility located in Dugway, Utah. Because incineration is typically substantially more costly than land disposal and in the case of spent media from MTBLW Well #7 would require considerable freight expense to transport it to the nearest facility, incineration is currently not the most cost-effective disposal method. For this reason, incineration was not considered for the LCCA.

Land disposal is the process of placing waste within engineered earthen burials. Because of the uncertain regulatory landscape with respect to PFAS, most waste disposal companies will only accept waste containing at PFAS at Class I hazardous waste landfills, where the waste can be placed in cells with closed-loop leachate containment systems. Of the three disposal options considered, land disposal is currently the most viable for disposal of single use IX resin. There is always the long-term liability related to land disposal of waste, should a hazardous waste landfill be required to take site mitigation actions due to unauthorized releases from the landfill. Disposal and waste freight costs in the LCCA were added whenever an IX changeout was to occur.

6.4.4 Freight Costs for Spent Media

The full-scale IX alternatives would require one IX treatment system, which means that each changeout would require the transportation of approximately 19 cy or equivalently 15 tons of IX resin (all IX resins have approximately the same density). If the media were transported in roll off bins with capacities of 18 tons and 16 cy, this means that an IX resin changeout would require one roll off bin and one 1-cy super sack.

6.5 Sensitivity Analysis

Sensitivity analysis was conducted due to the uncertainty of the estimation method used to predict PFOA breakthrough based linear extrapolation. This analysis was conducted by adjusting the estimated bed life up to $\pm 30\%$. The results of this analysis for all tested media in terms of 2021 dollars per 1000 gallons treated are shown in **Figure 10**.

The NPV over a 20-year life for the F400 GAC is approximately \$2,700,000 of which approximately 51% is attributed to capital costs and 49% is attributed to O&M costs. This is equivalent to \$0.17/1,000 gallons. When the bed life was adjusted by $\pm 30\%$, the 20-year life cycle cost varied between approximately \$0.15/1,000 gallons treated (10% cost decrease) and \$0.21/1000 gallons treated (20% cost increase).

The NPV over a 20-year life for the AV1240LDX GAC is approximately \$2,400,000 of which approximately 52% is attributed to capital costs and 48% is attributed to O&M costs. This is equivalent to \$0.15/1,000 gallons. When the bed life was adjusted by $\pm 30\%$, the 20-year life cycle

cost varied between approximately \$0.14/1,000 gallons treated (11% cost decrease) and \$0.18/1,000 gallons treated (20% cost increase).

The NPV over a 20-year life for the PSR2 Plus IX resin is approximately \$1,760,000 of which approximately 44% is attributed to capital costs and 56% is attributed to O&M costs. This is equivalent to \$0.11/1,000 gallons treated. When the bed life was adjusted by $\pm 30\%$, the 20-year life cycle cost varied between approximately \$0.10/1,000 gallons treated (14% cost decrease) and \$0.13/1,000 gallons treated (18% cost increase).

The NPV over a 20-year life for the PFCR-2 IX resin is approximately \$1,850,000 of which approximately 40% is attributed to capital costs and 60% is attributed to O&M costs. This is equivalent to \$0.12/1,000 gallons treated. When the bed life was adjusted by $\pm 30\%$, the 20-year life cycle cost varied between approximately \$0.10/1,000 gallons treated (12% cost decrease) and \$0.14/1,000 gallons treated (22% cost increase).

Based on the sensitivity analysis, the GAC alternatives are generally more sensitive to uncertainties in the bed life estimates than the IX alternatives. This sensitivity is driven by the fact that the bed lives of all GACs become less than 12 months when adjusted down by 30% from the baseline bed lives predicted by the pilot test results. This leads to some years requiring two or more changeouts for the GAC alternatives, which drives up the life cycle costs. In contrast, none of the IX resin bed lives fell below 12 months in the range of the bed life perturbations ($\pm 30\%$). This means that for all IX resins, each year requires one or no media changeouts, which serves to drive life cycle costs down.

6.6 LCCA Summary and Evaluation of Alternatives

The following table summarizes the findings of the life cycle cost analyses for the two best performing GACs and IX resins:

Item	F400	AV1240LDX	PSR2 Plus	PFCR-2
Total Equipment & Installation Capital Costs	\$1,380,000	\$1,240,000	\$777,000	\$733,000
20-Year Total O&M	\$1,630,000	\$1,330,000	\$1,220,000	\$1,380,000
20-Year NPV	\$2,700,000	\$2,400,000	\$1,760,000	\$1,850,000
Life Cycle Cost (\$/1000 gallons)	\$0.17	\$0.15	\$0.11	\$0.12
Life Cycle Cost (\$/acre-ft gallons)	\$55.80	\$49.64	\$36.34	\$38.23

A more detailed cost summary is provided in **Table 7** which also includes the results for the other four tested media. Based on the above analysis, GSI finds the PSR2 Plus IX resin to be the more cost-effective media alternative for removing PFOA and other PFAS from drinking water sourced at MTBLW Well #7. This evaluation is made based on the results of a pilot study that operated for 12 months and a life cycle cost assessment that considered both capital (equipment and media) and future O&M (media changeouts and differential electrical costs for pumping) costs over a 20-year life. All IX resins were found to be more cost-effective than the best performing GAC (F400) or the most cost-effective GAC (AV1240LDX), with the PSR2 Plus and PFCR-2 resins having the lowest life cycle costs.

This analysis did not include addition costs for site-specific work such as concrete pads, electrical, instrumentation and controls setup, etc. or other O&M activities such as GAC backwashing (equipment and well downtime) or system maintenance. Most of these costs are anticipated to be

similar between GAC and IX alternatives, however backwashing of GAC vessels would be anticipated to only apply to the GAC alternative (vendors do not recommend backwashing IX). This would result in added costs to the GAC alternative in the form of additional equipment (backwash tank, pump, and plumbing) and labor. Therefore, the inclusion of GAC vessel backwashing would only increase the life cycle cost of the GAC alternative and make it less favorable in comparison with the two presented IX alternatives.

7.0 CONCLUSIONS AND LESSONS LEARNED

A summary of the conclusions, recommendations, and lessons learned generated from the pilot test are as follows:

1. PFOA breakthrough is predicted to be the main driver for media changeouts at MTBLW Well #7. Although the removal efficiency of short-chain PFAS is typically lower than for PFOA, PFOA's response level currently the lowest of all PFAS with current health-based advisory levels for drinking water. The main driver could change as PFAS regulations evolve or if the source water concentrations change.
2. The majority of tested GAC removed PFOA to below 2 ng/L for a shorter operational period than a similar pilot study (Jacobs, 2021), despite having similar PFAS concentrations and profiles and similar concentrations of TOC. Calgon F400, which did not break through in the pilot column effluent at the PFOA RL at any point during the study, is projected to have a bed life of approximately 54,000 BVs This is comparable to the results presented in the OCWD study (Jacobs, 2021).
3. Breakthrough, from initial to complete exhaustion, tended to be gradual, with the shortest breakthrough duration being 1 month for PFBS. This would allow for operators to sample relatively infrequently (once per month) and still be able to maximize utilization of media adsorption capacity for PFOA and changeout media prior to complete breakthrough.
4. Perfluorocarboxylic acids tended to breakthrough before perfluorosulfonic acids, with short-chain PFAS generally eluting earlier than long-chain PFAS.
5. TOC and DOC were reported in well water samples at approximately 1 mg/L, which likely reduced the GAC efficiency for PFAS removal. Source water with lower TOC concentrations may result in more efficient GAC performance. Future pilot tests at other sites may choose to test source water for TOC and DOC to assess GAC's tendency for removing TOC and DOC, reducing bed life for target contaminants.
6. PSR2 Plus had the longest time to break through compared to other resins. While not confirmed, the difference in performance may be in part due to less impact from background sulfate as less sulfate was likely removed by PSR2 Plus than other resins based on results from a similar pilot study (Jacobs, 2021).
7. The relative influent concentrations and adsorption affinities of PFAS compounds affect the overall elution behavior. Chromatographic peaking, a phenomenon where effluent concentrations exceed influent concentrations due to displacement of adsorbed contaminant mass by compounds with higher adsorption affinities, was observed through mid-column samples. While monitoring of lead-vessel concentrations and the existence of a lag media vessel would ensure that high concentrations of PFAS were not discharged from an adsorption system, changes in influent PFAS concentrations should be monitored because they could affect overall removal performance of key PFAS constituents.
8. All IX media tested during the study were capable of treating more water than any of the GACs prior to breakthrough. The poorest performing IX resin had a bed life that was approximately 11 times longer than the worst performing GAC.

9. Although breakthrough to the RL for PFOA was not achieved for three of the IX resins, even conservative estimates of breakthrough bed volumes using linear extrapolations of the steepest, early breakthrough curve slopes showed that IX was a more economical treatment option than GAC.
10. The frequency of changing the pilot test pretreatment cartridge filter indicates that pretreatment costs, such as a bag filter pretreatment system, will need to be considered for any pumpers requiring wellhead treatment.
11. The PSR2 Plus IX resin appeared to have the largest PFOA removal capacity of the four IX resins tested.
12. The reagglomerated carbon (Calgon F400) outperformed the direct-activated carbons in the pilot test in terms of time to PFOA breakthrough at the RL of 10 ng/L.
13. The primary cost driver for adsorption systems appears to be the frequency of required media changeouts. While some capital cost differences exist between GAC and IX alternatives, they tend to be relatively minor in comparison with media changeout costs. Additionally, while IX resins have larger unit costs on a volume basis, PFAS adsorption capacities tend to be higher than GAC resulting in smaller vessels and lower bed volumes being required. This means that when comparing two or more adsorbent alternatives, differences in the number of annual media changeouts, adsorption capacity, and media unit cost all affect long term life cycle costs.
14. The PSR2 Plus IX resin was found to be the most economical media tested based on pilot study results and the 20-year life cycle cost analysis.
15. The AV1240LDX GAC was found to be the most economical GAC tested based on pilot study results and the 20-year life cycle cost analysis.
16. The IX media (except for the PFA694E) had lower life cycle costs than the most cost-effective GAC based on the results of the pilot testing.
17. Life cycle costs for media alternatives with longer bed lives (the majority of the IX resins) were generally less sensitive to perturbations in the estimated bed life than those with shorter bed lives.
18. Despite differences in bed life performance for PSR2 Plus (~675,000 BVs) and PFCR-2 (500,000 BVs) IX resins, they are similar in terms of O&M costs due to considerably different unit costs (\$275/ft³ and \$235/ft³, respectively).
19. Although IX treatment of PFOA appears to be more economical than GAC for the water tested at the design flow rate of 1,500 gpm, GAC systems may be more useful than IX if the groundwater contains other contaminants. For example, groundwater that contains both VOCs and PFAS may use a GAC system for treatment of both compounds. Similarly, groundwater which contains both PFAS and perchlorate may be able to use IX treatment more effectively depending on the choice of resin. However, competing compounds may affect the efficiency of PFAS removal of both GAC and IX, so groundwater containing additional contaminants (e.g., higher TOC and possibly sulfate depending on resin) may increase the change-out frequency intervals predicted in this report. Lastly, additional analysis would need to be conducted to evaluate how life cycle costs would scale with increasing design flow rate.
20. If the area available for a wellhead treatment system is limited, a smaller-footprint ion exchange treatment system may be more favorable as compared to a GAC treatment system.

8.0 REFERENCES

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**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED
CARBON TO TREAT GROUNDWATER IMPACTED WITH
PER- AND POLYFLUOROALKYL SUBSTANCES
MONTEBELLO LAND & WATER COMPANY – WATER SUPPLY WELL #7**

Tables

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Table 1: Sampling Frequency and Analytical Methods
MTBLW Well #7
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Sampling Date	Sample Locations and Sample Sets				
	Influent (Weekly Set) ¹	Influent (PFAS, DOC, and TOC)	Influent (Monthly Extended Set) ²	Effluent (PFAS)	Midpoints ³ (PFAS)
04/24/2020			x		
05/06/2020	x			x	
05/12/2020	x			x	
05/19/2020	x			x	
05/26/2020			x	x	
06/02/2020	x			x	
06/09/2020	x			x	
06/16/2020	x			x	
06/23/2020			x	x	
06/30/2020	x				x
07/07/2020	x			x	
07/15/2020	x			x	
07/24/2020	x			x	
07/30/2020			x		x
08/06/2020	x			x	
08/13/2020	x			x	
08/20/2020			x	x	
08/27/2020	x				x
09/03/2020	x			x	
09/10/2020	x			x	
09/17/2020			x	x	
09/24/2020					x
10/01/2020				x	
10/08/2020				x	
10/15/2020			x	x	x
10/22/2020				x	

Table 1: Sampling Frequency and Analytical Methods
MTBLW Well #7
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Sampling Date	Sample Locations and Sample Sets				
	Influent (Weekly Set) ¹	Influent (PFAS, DOC, and TOC)	Influent (Monthly Extended Set) ²	Effluent (PFAS)	Midpoints ³ (PFAS)
11/05/2020				x	
11/19/2020			x	x	x
12/04/2020				x	
12/17/2020			x	x	x
01/07/2021		x		x	
01/27/2021		x	x	x	
02/25/2021		x		x	
03/25/2021		x	x	x	x
04/22/2021		x		x	

Notes:

1. Weekly influent sample set consisted of PFAS and general water quality parameters are listed in Table 2
2. Monthly influent sample set consisted of general water quality parameters, metals, volatile organic compounds are listed in Table 3
3. Midpoint samples were collected at approximately 50% and 32% of the bed volumes for GAC and IX columns, respectively

Abbreviations:

- MTBLW = Montebello Land & Water Company
- PFAS = Per- and polyfluoroalkyl substances
- TOC = Total organic carbon
- DOC = Dissolved organic carbon
- GAC = Granular activated carbon
- IX = Ion exchange
- x = Sample location/sample set collected and analyzed

**Table 2: Influent Water Quality Summary - PFAS and General Parameters
 MTBLW Well #7**

PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Sample ID	Sampling Date	PFAS								General Parameters						
		Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Alkalinity in CaCO ₃ units	Chloride	Nitrate as NO ₃ (calculation)	Sulfate	Total Nitrate, Nitrite-N (calculation)	Dissolved Organic Carbon	Total Organic Carbon
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
--	05/28/19	22	34	8.9	<8.7	<8.7	<8.7	<8.7	<8.7	--	--	--	--	--	--	--
--	07/01/19	23	45	8.8	9.6	<8.8	<8.8	<8.8	<8.8	--	--	--	--	--	--	--
--	08/22/19	20	36	8.7	12	7.6	5.6	3.9	2	--	--	--	--	--	--	--
MB-INF-20200424	04/24/20	15	39	6.8	8.0	3.8	2.6	3.3	<2.0	170	54	9.9	82	2.2	--	0.6
MB-INF-DUP-20200424	04/24/20	15	40	7.2	7.7	3.6	2.6	3.7	2.0	--	--	--	--	--	--	--
MB-INF-20200506	05/06/20	15	35	6.8	9.1	4.6	3.3	3.4	2.1	170	53	10	80	2.4	--	0.78
MB-INF-20200512	05/12/20	14	33	6.2	8.8	4.5	3.3	3.4	2.0	170	53	10	80	2.4	--	0.59
MB-INF-20200519	05/19/20	5.9	13	2.5	3.6	<2.0 UJ	<2.0	<2.0	<2.0 UJ	170	56	11	84	2.4	--	0.71
MB-INF-20200526	05/26/20	14	34	6.4	9.7	4.3	3.4	3.6	<2.0	170	52	10	78	2.4	--	0.77
MB-INF-20200602	06/02/20	14	34	6.2	9.1	4.1	3.1	3.4	2.0	170	52	10	78	2.4	--	0.76
MB-INF-20200609	06/09/20	14	32	6.0	7.6	3.6	2.7	3.6	<2.0	170	52	10	78	2.4	--	0.80
MB-INF-20200616	06/16/20	14	33	6.2	8.8	4.3	3.3	3.3	<2.0	170	52	11	78	2.4	--	0.82
MB-INF-20200623	06/23/20	14	32	6.2	8.6	4.1	3.2	3.4	<2.0	170	54	11	80	2.4	--	0.68
MB-INF-20200630	06/30/20	14	33	6.0	8.7	4.2	3.1	3.6	<2.0	170	54	10	79	2.3	--	0.76
MB-INF-20200707	07/07/20	14	33	5.9	8.4	3.5	2.8	3.3	<2.0	170	52	10	79	2.4	--	--
MB-INF-20200715	07/15/20	14	33	6.3	9.0	4.0	3.2	3.5	<2.0	170	53	10	78	2.3	--	0.72
MB-INF-20200724	07/24/20	15	35	6.4	8.8	4.4	3.4	3.6	<2.0	170	52	11	79	2.4	--	0.77
MB-INF-DUP-20200724	07/24/20	15	36	6.4	9.0	4.5	3.3	3.5	<2.0	--	--	--	--	--	--	--
MB-INF-20200730	07/30/20	14	35	6.2	8.4	4.1	3.3	3.7	<2.0	170	52	10	79	2.4	--	0.77
MB-INF-20200806	08/06/20	16	38	6.6	9.5	5.2	3.9	3.4	2.0	170	51	11	78	2.4	--	0.71
MB-INF-20200813	08/13/20	14	34	6.1	8.8	5.1	3.5	3.8	<2.0	--	51	11	79	2.5	--	0.86
MB-INF-DUP-20200813	08/13/20	14	34	6.3	8.9	4.6	3.5	3.9	<2.0	--	--	--	--	--	--	--
MB-INF-20200820	08/20/20	14	34	6.5	9.3	4.9	3.6	3.5	<2.0	170	48	11	77	2.6	--	0.82

**Table 2: Influent Water Quality Summary - PFAS and General Parameters
 MTBLW Well #7**

PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Sample ID	Sampling Date	PFAS								General Parameters						
		Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)	Alkalinity in CaCO ₃ units	Chloride	Nitrate as NO ₃ (calculation)	Sulfate	Total Nitrate, Nitrite-N (calculation)	Dissolved Organic Carbon	Total Organic Carbon
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MB-INF-20200827	08/27/20	16	36	6.6	9.2	5.5	4.0	3.4	<2.0	170	48	11	77	2.6	--	0.80
MB-INF-20200903	09/03/20	16	35	6.6	9.1	5.3	3.8	3.8	<2.0	170	48	11	75	2.6	--	1.1
MB-INF-20200910	09/10/20	15	36	6.5	8.7	5.9	4.2	3.7	<2.0	170	47	12	75	2.7	--	0.92
MB-INF-20200917	09/17/20	16	37	6.8	9.8	6.0	4.4	3.6	<2.0	160	51	12	77	2.6	--	0.95
MB-INF-DUP-20200917	09/17/20	16	37	6.8	9.8	6.1	4.2	3.6	<2.0	--	--	--	--	--	--	--
MB-INF-20201015	10/15/20	17	39	6.5	9.6	7.1	4.4	3.8	2.1	160	50	12	77	2.7	--	0.89
MB-INF-20201119	11/19/20	16	43	6.7	10	7.0	4.7	4.0	<2.0	160	45	12	71	2.6	--	0.79
MB-INF-20201217	12/17/20	17	39	7.0	9.5	7.3	4.9	4.2	2.0	160	49	12	72	2.7	--	0.72
MB-INF-20210107	01/07/21	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8	0.7
MB-INF-20210127	01/27/21	15	42	6.3	9	6.3	3.8	3.8	2.0	160	50	11	74	2.5	0.74	1.3
MB-INF-20210224	02/24/21	16	42	6.7	9.6	6.7	4.1	3.6	2.1	--	--	--	--	--	1.3	0.7
MB-INF-20210325	03/25/21	15	42	6.8	10	6.4	4.0	3.6	2.0	160 J	50	11	72	2.6	0.76	1.0

Notes:

1. Montebello Land & Water Company Well #7 (WRD ID = 200059)
2. Only PFAS compounds with detections in the 2020-2021 Treatment Pilot Study samples are shown in this table. Samples were analyzed for 18 PFAS compounds in total.
3. Historic sample results prior to 2020 are provided by WRD.

Abbreviations:

PFAS = Per- and polyfluoroalkyl substances
 ng/L = nanograms per liter (or ppt = parts per trillion)
 mg/L = milligrams per liter
 CaCO₃ = calcium carbonate
 NO₃ = nitrate

WRD = Water Replenishment District
 MTBLW = Montebello Land & Water Company
 J = detection is estimated
 UJ = the result is estimated non-detect
 < = not detected at or above the reporting limit shown

Table 3: Influent Water Quality Summary - Other Parameters
MTBLW Well #7

PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Sample ID	Sampling Date	Inorganics			Metals										VOCs	Others	
		Total Dissolved Solids (TDS)	Total Suspended Solids (TSS)	Total Hardness as CaCO ₃ (Calculated)	Arsenic, Total	Calcium, Total	Hexavalent chromium (Dissolved)	Iron, Total	Magnesium, Total	Manganese, Total	Potassium, Total	Sodium, Total	Uranium by ICPMS as pCi/L (Calculated)	Uranium, ICAP/MS	VOCs	Oil and Grease	Perchlorate
		mg/L	mg/L	mg/L	µg/L	mg/L	µg/L	mg/L	mg/L	µg/L	mg/L	mg/L	pCi/L	µg/L	µg/L	mg/L	µg/L
--	12/18/08	470	--	220	<1	67	--	<40	14	<20	4.5	62	--	--	--	--	<4
--	11/15/11	480	--	250	<2	74	--	<100	15	<20	4.5	56	--	--	--	--	--
--	05/22/17	510	--	265	<2	79	<1	<100	16.4	<20	4.7	57	--	--	--	--	<4
--	10/13/17	--	--	--	--	--	--	--	--	--	--	--	1.7	--	--	--	--
--	02/28/19	--	--	--	--	--	--	--	--	--	--	--	--	--	All NDs	--	<4
MB-INF-20200424	04/24/20	390	<10	220	1.3	65	0.34	0.057	13	2.8	3.9	52	1.5	2.2	All NDs	<0.95	<4.0
MB-INF-20200526	05/26/20	370	<10	210	1.6	63	0.4	<0.020	12	<2.0	3.9	52	1.4	2.2	All NDs	<0.95	<4.0
MB-INF-20200623	06/23/20	390	<10	210	2.0	63	0.42	<0.020	12	<2.0	4.0	52	1.4	2.1	All NDs	3.91	<4.0
MB-INF-20200730	07/30/20	390	<10	220	1.6	65	0.41	<0.020	13	<2.0	4.0	54	1.6	2.5	All NDs	2.38	<4.0
MB-INF-20200820	08/20/20	390	<10	200	--	62	0.44	<0.020	12	<2.0	<10	55	1.4	2.1	All NDs	<0.97	<4.0
MB-INF-20200917	09/17/20	400	<10	200	1.7	61	0.44	<0.020	12	<2.0	3.9	51	1.5	2.2	All NDs	<0.96	<4.0
MB-INF-20201015	10/15/20	400	<10	200	1.4	61	0.44	<0.020	12	<2.0	4.0	52	1.3	2.0	--	1.88	<4.0
MB-INF-20201119	11/19/20	370	<10	210	1.4	64	0.48	<0.020	12	<2.0	4.0	53	1.3	1.9	All NDs	<0.966	<4.0
MB-INF-20201217	12/17/20	400	<10	200	1.2	62	0.48	<0.020	12	<2.0	3.8	51	1.3	2.0	All NDs	0.956	<4.0
MB-INF-20210127	01/27/21	390	<10	210	1.3	63	0.47	<0.020	12	<2.0	3.8	52	1.2	1.8	All NDs	2.33	<4.0
MB-INF-20210325	03/25/21	390	<10	210	1.4 J	63	0.46	<0.01	12	<2.0	3.8	52	1.2	1.9	All NDs	<0.971	<2.0

Notes:

1. Montebello Land & Water Company Well #7 (WRD ID = 200059)
2. Historic sample results shown are the last three samples analyzed for inorganics and metals prior to 2020.
 Historic sample results prior to 2020 are provided by WRD.

Abbreviations:

mg/L = milligrams per liter
 µg/L = micrograms per liter
 pCi/L = picoCuries per liter
 ICPMS = inductively coupled plasma mass spectrometry

MTBLW = Montebello Land & Water Company
 WRD = Water Replenishment District
 J = detection is estimated
 ND = not detected

ICAP/MS = inductively coupled argon plasma mass spectrometry
 VOCs = volatile organic compounds
 < = not detected at or above the reporting limit shown

Table 4: GAC Treated Water Quality Summary

MTBLW Well #7

PFAS Treatment Pilot Study

Water Replenishment District of Southern California

Granular Activated Carbon (GAC) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
AV1240CB	05/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	06/16/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	06/23/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	07/07/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	07/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	07/24/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	08/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	08/13/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	08/20/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240CB	09/03/20	6.2	6.0	<2.0	6.0	4.6	2.1	<2.0	<2.0
AV1240CB	09/10/20	2.4	<2.0	<2.0	4.0	3.9	<2.0	<2.0	<2.0
AV1240CB	09/17/20	2.9	<2.0	<2.0	4.5	4.3	<2.0	<2.0	<2.0
AV1240CB	10/01/20	3.6	<2.0	<2.0	5.8	5.1	<2.0	<2.0	<2.0
AV1240CB	10/08/20	3.9	<2.0	<2.0	6.0	5.7	2.0	<2.0	<2.0
AV1240CB	10/15/20	7.6	4.8	2.1	9.1	7.3	3.2	<2.0	<2.0
AV1240CB	10/22/20	6.9	3.7	<2.0	7.8	7.1	3.2	<2.0	<2.0
AV1240CB	11/05/20	7.5	4.1	2.0	9.1	7.6	3.5	<2.0	<2.0
AV1240CB	11/19/20	7.3	3.4	<2.0	9.8	7.4	3.3	<2.0	<2.0
AV1240CB	12/04/20	8.4	5.1	2.4	10	7.4	3.6	<2.0	<2.0
AV1240CB	12/17/20	9.9	7.2	2.8	9.8	7.9	3.9	<2.0	<2.0
AV1240CB	01/07/21	9.7	6.2	2.7	9.7	7.3	3.7	<2.0	<2.0
AV1240CB	01/27/21	9.4	6.9	2.8	9.4	6.3	3.0	<2.0	<2.0
AV1240CB	02/24/21	12	12	4.0	11	7.5	4.0	2.0	<2.0
AV1240CB	03/25/21	12	13	4.2	11	6.6	3.5	2.1	<2.0
AV1240CB	04/22/21	13	16	4.7	11	6.9	4.0	2.3	<2.0
AV1240CB M	06/30/20	2.2	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0
AV1240CB M	07/30/20	3.5	2.7	<2.0	3.5	2.6	<2.0	<2.0	<2.0
AV1240CB M	08/27/20	7.6	6.6	2.0	6.8	5.2	2.7	<2.0	<2.0
AV1240CB M	09/24/20	9.9	10	3.2	9.2	6.3	3.5	<2.0	<2.0

Table 4: GAC Treated Water Quality Summary
MTBLW Well #7
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Granular Activated Carbon (GAC) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
AV1240CB M	10/15/20	14	17	4.3	10	8.0	4.2	2.2	<2.0
AV1240CB M	11/19/20	12	14	4.3	11	7.9	4.4	2.1	<2.0
AV1240CB M	12/17/20	14	21	5.3	10	8.6	5.0	2.8	<2.0
AV1240CB M	03/25/21	14	25	6	11	6.4	3.7	3.1	<2.0
AV1240LDX	05/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	06/16/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	06/23/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	07/07/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	07/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	07/24/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	08/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	08/13/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	08/20/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	09/03/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	09/10/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX	09/17/20	<2.0	<2.0	<2.0	2.3	<2.0	<2.0	<2.0	<2.0
AV1240LDX	10/01/20	<2.0	<2.0	<2.0	8.2	5.5	<2.0	<2.0	<2.0
AV1240LDX	10/08/20	<2.0	<2.0	<2.0	10	7.1	<2.0	<2.0	<2.0
AV1240LDX	10/15/20	<2.0	<2.0	<2.0	14	9.2	<2.0	<2.0	<2.0
AV1240LDX	10/22/20	<2.0	<2.0	<2.0	14	9.7	<2.0	<2.0	<2.0
AV1240LDX	11/05/20	<2.0	<2.0	<2.0	16	11	<2.0	<2.0	<2.0
AV1240LDX	11/19/20	<2.0	<2.0	<2.0	18	11	2.4	<2.0	<2.0
AV1240LDX	12/04/20	<2.0	<2.0	<2.0	17	10	4.0	<2.0	<2.0
AV1240LDX	12/17/20	2.4	<2.0	<2.0	16	9.9	4.8	<2.0	<2.0
AV1240LDX	01/07/21	4.3	<2.0	<2.0	14	9.4	5.5	<2.0	<2.0
AV1240LDX	01/27/21	7.0	<2.0	2.7	12	7.8	5.0	<2.0	<2.0
AV1240LDX	02/24/21	13	<2.0	4.8	13	8.9	6.0	<2.0	<2.0
AV1240LDX	03/25/21	17	2.2	6.7	13	7.9	5.5	<2.0	<2.0
AV1240LDX	04/22/21	19	5.2	7.5	12	7.8	5.5	<2.0	<2.0

Table 4: GAC Treated Water Quality Summary
MTBLW Well #7
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Granular Activated Carbon (GAC) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
AV1240LDX M	06/30/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240LDX M	07/30/20	<2.0	<2.0	<2.0	6.5	3.6	<2.0	<2.0	<2.0
AV1240LDX M	08/27/20	3.0	<2.0	<2.0	11	6.1	2.4	<2.0	<2.0
AV1240LDX M	09/24/20	7.1	<2.0	2.6	12	7.6	3.8	<2.0	<2.0
AV1240LDX M	10/15/20	12	3.7	4.4	13	8.5	5.0	<2.0	<2.0
AV1240LDX M	11/19/20	15	6.1	5.8	13	8.5	5.6	<2.0	<2.0
AV1240LDX M	12/17/20	15	14	6.4	11	7.7	4.9	2.3	<2.0
AV1240LDX M	03/25/21	16	26	7.3	11	6.6	4.0	3.5	<2.0
AV1240PFAS	05/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	06/16/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	06/23/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	07/07/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	07/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	07/24/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	08/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	08/13/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	08/20/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AV1240PFAS	09/03/20	<2.0	<2.0	<2.0	4.6	3.2	<2.0	<2.0	<2.0
AV1240PFAS	09/10/20	<2.0	<2.0	<2.0	5.1	3.8	<2.0	<2.0	<2.0
AV1240PFAS	09/17/20	<2.0	<2.0	<2.0	5.1	3.9	<2.0	<2.0	<2.0
AV1240PFAS	10/01/20	<2.0	<2.0	<2.0	8.2	5.7	<2.0	<2.0	<2.0
AV1240PFAS	10/08/20	<2.0	<2.0	<2.0	8.4	6.4	<2.0	<2.0	<2.0
AV1240PFAS	10/15/20	3.4	<2.0	<2.0	11	7.8	2.7	<2.0	<2.0
AV1240PFAS	10/22/20	4.8	<2.0	<2.0	10	7.7	3.3	<2.0	<2.0
AV1240PFAS	11/05/20	5.6	<2.0	<2.0	11	8.0	3.6	<2.0	<2.0
AV1240PFAS	11/19/20	6.2	<2.0	2.1	12	8.2	3.8	<2.0	<2.0
AV1240PFAS	12/04/20	9.3	3.3	3.4	12	8.1	4.3	<2.0	<2.0
AV1240PFAS	12/17/20	10	5.0	4.0	12	8.9	4.2	<2.0	<2.0
AV1240PFAS	01/07/21	12	6.4	4.4	11	7.8	4.3	<2.0	<2.0

Table 4: GAC Treated Water Quality Summary
MTBLW Well #7
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Granular Activated Carbon (GAC) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
AV1240PFAS	01/27/21	12	7.4	4.5	11	7.2	3.9	<2.0	<2.0
AV1240PFAS	02/24/21	15	13	6.0	12	8.0	4.7	2.3	<2.0
AV1240PFAS	03/25/21	16	16	6.2	12	7.6	4.5	2.7	<2.0
AV1240PFAS	04/22/21	15	21	6.4	11	6.9	4.2	2.8	<2.0
AV1240PFAS M	06/30/20	<2.0	<2.0	<2.0	2.5	<2.0	<2.0	<2.0	<2.0
AV1240PFAS M	07/30/20	2.2	<2.0	<2.0	5.2	3.2	<2.0	<2.0	<2.0
AV1240PFAS M	08/27/20	7.2	5.1	2.5	8.3	5.2	2.7	<2.0	<2.0
AV1240PFAS M	09/24/20	10	9	3.9	10	6.4	3.5	<2.0	<2.0
AV1240PFAS M	10/15/20	14	15	5.2	11	7.6	4.4	2.1	<2.0
AV1240PFAS M	11/19/20	14	17	5.8	12	8.4	4.8	2.3	<2.0
AV1240PFAS M	12/17/20	15	24	6.5	11	8.4	5.0	2.9	<2.0
AV1240PFAS M	03/25/21	16	31	6.6	11	6.3	3.9	3.5	<2.0
F400	05/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	06/16/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	06/23/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	07/07/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	07/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	07/24/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	08/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	08/13/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	08/20/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	09/03/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	09/10/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	09/17/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	10/01/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400	10/08/20	<2.0	<2.0	<2.0	<2.0	2.1	<2.0	<2.0	<2.0
F400	10/15/20	<2.0	<2.0	<2.0	3.7	3.4	<2.0	<2.0	<2.0
F400	10/22/20	<2.0	<2.0	<2.0	3.4	3.3	<2.0	<2.0	<2.0
F400	11/05/20	<2.0	<2.0	<2.0	4.9	4.3	<2.0	<2.0	<2.0

Table 4: GAC Treated Water Quality Summary
MTBLW Well #7
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Granular Activated Carbon (GAC) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
F400	11/19/20	<2.0	<2.0	<2.0	5.5	4.2	<2.0	<2.0	<2.0
F400	12/04/20	2.8	<2.0	<2.0	6.6	5.6	<2.0	<2.0	<2.0
F400	12/17/20	3.8	<2.0	<2.0	7.2	6.2	2.3	<2.0	<2.0
F400	01/07/21	4.0	2.0	<2.0	7.5	5.8	2.2	<2.0	<2.0
F400	01/27/21	4.4	2.5	<2.0	7.4	5.6	2.1	<2.0	<2.0
F400	02/24/21	6.8	5.0	2.3	9.1	6.8	2.7	<2.0	<2.0
F400	03/25/21	7.5	6.4	2.6	9.6	6.6	2.9	<2.0	<2.0
F400	04/22/21	8.9	8.8	3.4	9.6	6.8	3.3	<2.0	<2.0
F400 M	06/30/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
F400 M	07/30/20	2.4	2.4	<2.0	2.8	<2.0	<2.0	<2.0	<2.0
F400 M	08/27/20	4.7	4.8	<2.0	5.0	3.4	<2.0	<2.0	<2.0
F400 M	09/24/20	6.4	7.3	2.1	6.6	4.9	2.4	<2.0	<2.0
F400 M	10/15/20	8.9	10	3.0	8.6	6.3	2.9	<2.0	<2.0
F400 M	11/19/20	9.8	13	3.6	9.4	6.8	3.7	<2.0	<2.0
F400 M	12/17/20	12	18	4.3	9.1	7.6	4.1	2.2	<2.0
F400 M	03/25/21	11	20	4.9	10	7.0	3.2	2.4	<2.0

Notes:

- Montebello Land & Water Company Well #7 (WRD ID = 200059)
- Only PFAS compounds with detections in the 2020-2021 Treatment Pilot Study influent samples are shown in this table. Samples were analyzed for 18 PFAS compounds in total.

Abbreviations:

PFAS = Per- and polyfluoroalkyl substances
 ng/L = nanograms per liter (or ppt = parts per trillion)
 GAC = granular activated carbon

M = midpoint sample (located approximately in the middle of the column length)
 MTBLW = Montebello Land & Water Company
 < = not detected at or above the reporting limit shown

Table 5: IX Treated Water Quality Summary
MTBLW Well #7

PFAS Treatment Pilot Study

Water Replenishment District of Southern California

Ion Exchange (IX) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
PSR2 Plus	05/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	06/16/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	06/23/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	07/07/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	07/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	07/24/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PSR2 Plus	08/06/20	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0
PSR2 Plus	08/13/20	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0
PSR2 Plus	08/20/20	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0
PSR2 Plus	09/03/20	<2.0	<2.0	<2.0	<2.0	2.8	<2.0	<2.0	<2.0
PSR2 Plus	09/10/20	<2.0	<2.0	<2.0	<2.0	2.8	<2.0	<2.0	<2.0
PSR2 Plus	09/17/20	<2.0	<2.0	<2.0	<2.0	2.8	<2.0	<2.0	<2.0
PSR2 Plus	10/01/20	<2.0	<2.0	<2.0	<2.0	3.4	<2.0	<2.0	<2.0
PSR2 Plus	10/08/20	<2.0	<2.0	<2.0	<2.0	3.8	<2.0	<2.0	<2.0
PSR2 Plus	10/15/20	2.1	<2.0	<2.0	<2.0	4.6	<2.0	<2.0	<2.0
PSR2 Plus	10/22/20	<2.0	<2.0	<2.0	<2.0	4.6	<2.0	<2.0	<2.0
PSR2 Plus	11/05/20	2.1	<2.0	<2.0	<2.0	4.6	<2.0	<2.0	<2.0
PSR2 Plus	11/19/20	2.3	<2.0	<2.0	<2.0	4.4	<2.0	<2.0	<2.0
PSR2 Plus	12/04/20	2.2	<2.0	<2.0	<2.0	4.8	<2.0	<2.0	<2.0
PSR2 Plus	12/17/20	2.8	<2.0	<2.0	<2.0	5.7	<2.0	<2.0	<2.0
PSR2 Plus	01/07/21	2.8	<2.0	<2.0	<2.0	5.4	<2.0	<2.0	<2.0
PSR2 Plus	01/27/21	2.6	<2.0	<2.0	<2.0	5.4	<2.0	<2.0	<2.0
PSR2 Plus	02/24/21	3.0	<2.0	<2.0	<2.0	6.2	<2.0	<2.0	<2.0
PSR2 Plus	03/25/21	3.2	<2.0	<2.0	<2.0	6.2	2.0	<2.0	<2.0
PSR2 Plus	04/22/21	3.8	<2.0	<2.0	<2.0	6.0	2.3	<2.0	<2.0
PSR2 Plus M	06/30/20	4.5	<2.0	<2.0	<2.0	2.9	<2.0	<2.0	<2.0
PSR2 Plus M	07/30/20	4.2	<2.0	<2.0	<2.0	2.6	<2.0	<2.0	<2.0
PSR2 Plus M	08/27/20	4.6	<2.0	<2.0	<2.0	3.2	<2.0	<2.0	<2.0
PSR2 Plus M	09/24/20	6.6	<2.0	<2.0	<2.0	4.4	2.2	<2.0	<2.0

Table 5: IX Treated Water Quality Summary
MTBLW Well #7

PFAS Treatment Pilot Study

Water Replenishment District of Southern California

Ion Exchange (IX) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
PSR2 Plus M	10/15/20	12	3.4	<2.0	2.1	6.8	3.6	<2.0	<2.0
PSR2 Plus M	11/19/20	11	3.5	<2	2.8	6.2	3.4	<2.0	<2.0
PSR2 Plus M	12/17/20	10	3.8	<2.0	2.4	7.1	3.8	<2.0	<2.0
PSR2 Plus M	03/25/21	9.6	5.2	<2.0	3.5	6.0	3.2	2.1	<2.0
SIR-110-HP	05/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	06/16/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	06/23/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	07/07/20	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0
SIR-110-HP	07/15/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
SIR-110-HP	07/24/20	<2.0	<2.0	<2.0	<2.0	2.8	<2.0	<2.0	<2.0
SIR-110-HP	08/06/20	<2.0	<2.0	<2.0	<2.0	4.0	<2.0	<2.0	<2.0
SIR-110-HP	08/13/20	<2.0	<2.0	<2.0	<2.0	3.9	<2.0	<2.0	<2.0
SIR-110-HP	08/20/20	<2.0	<2.0	<2.0	<2.0	3.6	<2.0	<2.0	<2.0
SIR-110-HP	09/03/20	<2.0	<2.0	<2.0	<2.0	4.0	<2.0	<2.0	<2.0
SIR-110-HP	09/10/20	<2.0	<2.0	<2.0	<2.0	5.0	<2.0	<2.0	<2.0
SIR-110-HP	09/17/20	<2.0	<2.0	<2.0	<2.0	5.2	<2.0	<2.0	<2.0
SIR-110-HP	10/01/20	<2.0	<2.0	<2.0	<2.0	5.4	<2.0	<2.0	<2.0
SIR-110-HP	10/08/20	<2.0	<2.0	<2.0	<2.0	6.3	<2.0	<2.0	<2.0
SIR-110-HP	10/15/20	<2.0	<2.0	<2.0	<2.0	5.9	<2.0	<2.0	<2.0
SIR-110-HP	10/22/20	<2.0	<2.0	<2.0	<2.0	6.8	<2.0	<2.0	<2.0
SIR-110-HP	11/05/20	<2.0	<2.0	<2.0	<2.0	6.4	2.2	<2.0	<2.0
SIR-110-HP	11/19/20	<2.0	<2.0	<2.0	<2.0	6.6	2.3	<2.0	<2.0
SIR-110-HP	12/04/20	<2.0	<2.0	<2.0	<2.0	6.6	2.6	<2.0	<2.0
SIR-110-HP	12/17/20	<2.0	<2.0	<2.0	<2.0	6.9	3.0	<2.0	<2.0
SIR-110-HP	01/27/21	2.5	<2.0	<2.0	<2.0	6.8	3.4	<2.0	<2.0
SIR-110-HP	02/24/21	3.8	<2.0	<2.0	<2.0	7.4	4.1	<2.0	<2.0
SIR-110-HP	03/25/21	4.5	<2.0	<2.0	<2.0	7.3	4.1	<2.0	<2.0
SIR-110-HP	04/22/21	5.2	<2.0	<2.0	<2.0	6.9	4.0	<2.0	<2.0
SIR-110-HP M	06/30/20	3.7	<2.0	<2.0	<2.0	3.6	<2.0	<2.0	<2.0

Table 5: IX Treated Water Quality Summary
MTBLW Well #7

PFAS Treatment Pilot Study

Water Replenishment District of Southern California

Ion Exchange (IX) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluoroheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
SIR-110-HP M	07/30/20	5.0	<2.0	<2.0	<2.0	3.1	<2.0	<2.0	<2.0
SIR-110-HP M	08/27/20	6.3	<2.0	<2.0	<2.0	3.8	2.2	<2.0	<2.0
SIR-110-HP M	09/24/20	8.4	<2.0	<2.0	<2.0	5.0	2.9	<2.0	<2.0
SIR-110-HP M	10/15/20	11	<2.0	<2.0	2.1	5.9	3.6	<2.0	<2.0
SIR-110-HP M	11/19/20	9.6	<2.0	<2.0	2.5	5.4	3.2	<2.0	<2.0
SIR-110-HP M	12/17/20	8.3	<2.0	<2.0	2.2	5.1	3.2	<2.0	<2.0
SIR-110-HP M	03/25/21	10	3.0	<2.0	4.0	5.4	3.1	2.0	<2.0
PFA694E	05/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFA694E	06/16/20	<2.0	<2.0	<2.0	<2.0	2.2	<2.0	<2.0	<2.0
PFA694E	06/23/20	<2.0	<2.0	<2.0	<2.0	3.0	<2.0	<2.0	<2.0
PFA694E	07/07/20	<2.0	<2.0	<2.0	<2.0	4.3	<2.0	<2.0	<2.0
PFA694E	07/15/20	<2.0	<2.0	<2.0	<2.0	4.7	<2.0	<2.0	<2.0
PFA694E	07/24/20	<2.0	<2.0	<2.0	<2.0	4.9	<2.0	<2.0	<2.0
PFA694E	08/06/20	<2.0	<2.0	<2.0	<2.0	5.7	<2.0	<2.0	<2.0
PFA694E	08/13/20	<2.0	<2.0	<2.0	<2.0	5.0	<2.0	<2.0	<2.0
PFA694E	08/20/20	<2.0	<2.0	<2.0	<2.0	4.9	<2.0	<2.0	<2.0
PFA694E	09/03/20	<2.0	<2.0	<2.0	<2.0	5.0	<2.0	<2.0	<2.0
PFA694E	09/10/20	<2.0	<2.0	<2.0	<2.0	4.8	<2.0	<2.0	<2.0
PFA694E	09/17/20	<2.0	<2.0	<2.0	<2.0	5.7	2.5	<2.0	<2.0
PFA694E	10/01/20	<2.0	<2.0	<2.0	<2.0	6.1	2.6	<2.0	<2.0
PFA694E	10/08/20	<2.0	<2.0	<2.0	<2.0	6.6	3.3	<2.0	<2.0
PFA694E	10/15/20	2.4	<2.0	<2.0	<2.0	7.0	3.4	<2.0	<2.0
PFA694E	10/22/20	2.5	<2.0	<2.0	<2.0	7.1	3.8	<2.0	<2.0
PFA694E	11/05/20	3.1	<2.0	<2.0	<2.0	6.7	4.1	<2.0	<2.0
PFA694E	11/19/20	3.7	<2.0	<2.0	<2.0	6.9	4.1	<2.0	<2.0
PFA694E	12/04/20	4.2	<2.0	<2.0	<2.0	6.8	4.1	<2.0	<2.0
PFA694E	12/17/20	5.0	<2.0	<2.0	<2.0	6.8	4.2	<2.0	<2.0
PFA694E	01/07/21	5.9	<2.0	<2.0	<2.0	7.1	4.4	<2.0	<2.0
PFA694E	01/27/21	6.5	<2.0	<2.0	<2.0	6.3	4.0	<2.0	<2.0

Table 5: IX Treated Water Quality Summary
MTBLW Well #7

PFAS Treatment Pilot Study

Water Replenishment District of Southern California

Ion Exchange (IX) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
PFA694E	02/24/21	8.8	<2.0	<2.0	<2.0	7.1	4.9	<2.0	<2.0
PFA694E	03/25/21	10	<2.0	<2.0	<2.0	6.4	4.5	<2.0	<2.0
PFA694E	04/22/21	12	<2.0	<2.0	<2.0	6.5	4.8	<2.0	<2.0
PFA694E M	06/30/20	6.5	<2.0	<2.0	<2.0	4.6	2.9	<2.0	<2.0
PFA694E M	07/30/20	6.8	<2.0	<2.0	<2.0	4.2	2.7	<2.0	<2.0
PFA694E M	08/27/20	7.5	<2.0	<2.0	<2.0	5.0	3.0	<2.0	<2.0
PFA694E M	09/24/20	10	<2.0	<2.0	3.7	5.9	3.5	<2.0	<2.0
PFA694E M	10/15/20	12	2.1	<2.0	4.3	6.7	4.1	<2.0	<2.0
PFA694E M	11/19/20	15	<2.0	<2.0	5.9	7.4	4.6	2.4	<2.0
PFA694E M	12/17/20	13	2.5	<2.0	5.4	7.6	4.6	2.0	<2.0
PFA694E M	03/25/21	15	5.8	<2.0	8.7	6.4	4.0	2.8	<2.0
PFCR-2	05/06/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	05/12/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	05/19/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	05/26/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	06/02/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	06/09/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	06/16/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	06/23/20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
PFCR-2	07/07/20	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	<2.0	<2.0
PFCR-2	07/15/20	<2.0	<2.0	<2.0	<2.0	2.5	<2.0	<2.0	<2.0
PFCR-2	07/24/20	<2.0	<2.0	<2.0	<2.0	3.4	<2.0	<2.0	<2.0
PFCR-2	08/06/20	<2.0	<2.0	<2.0	<2.0	4.8	<2.0	<2.0	<2.0
PFCR-2	08/13/20	<2.0	<2.0	<2.0	<2.0	4.4	<2.0	<2.0	<2.0
PFCR-2	08/20/20	<2.0	<2.0	<2.0	<2.0	4.6	<2.0	<2.0	<2.0
PFCR-2	09/03/20	<2.0	<2.0	<2.0	<2.0	5.2	<2.0	<2.0	<2.0
PFCR-2	09/10/20	<2.0	<2.0	<2.0	<2.0	5.6	<2.0	<2.0	<2.0
PFCR-2	09/17/20	<2.0	<2.0	<2.0	<2.0	5.6	<2.0	<2.0	<2.0
PFCR-2	10/01/20	<2.0	<2.0	<2.0	<2.0	6.6	<2.0	<2.0	<2.0
PFCR-2	10/08/20	<2.0	<2.0	<2.0	<2.0	6.4	<2.0	<2.0	<2.0
PFCR-2	10/15/20	<2.0	<2.0	<2.0	<2.0	7.1	2.1	<2.0	<2.0
PFCR-2	10/22/20	<2.0	<2.0	<2.0	<2.0	7.0	2.6	<2.0	<2.0
PFCR-2	11/05/20	<2.0	<2.0	<2.0	<2.0	7.1	2.9	<2.0	<2.0
PFCR-2	11/19/20	<2	<2.0	<2.0	<2.0	6.8	2.9	<2.0	<2.0

**Table 5: IX Treated Water Quality Summary
 MTBLW Well #7**

PFAS Treatment Pilot Study

Water Replenishment District of Southern California

Ion Exchange (IX) Unit	Sampling Date	Perfluorooctanoic acid (PFOA)	Perfluorooctanesulfonic acid (PFOS)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanoic acid (PFHxA)	Perfluorooheptanoic acid (PFHpA)	Perfluorononanoic acid (PFNA)	Perfluorodecanoic acid (PFDA)
		ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
PFCR-2	12/04/20	2.0	<2.0	<2.0	<2.0	7.4	3.6	<2.0	<2.0
PFCR-2	12/17/20	2.4	<2.0	<2.0	<2.0	7.6	3.9	<2.0	<2.0
PFCR-2	01/07/21	2.5	<2.0	<2.0	<2.0	6.9	3.4	<2.0	<2.0
PFCR-2	01/27/21	2.8	<2.0	<2.0	<2.0	6.3	3.2	<2.0	<2.0
PFCR-2	02/24/21	5.1	<2.0	<2.0	<2.0	7.8	4.5	<2.0	<2.0
PFCR-2	03/25/21	6.1	<2.0	<2.0	<2.0	6.8	4.5	<2.0	<2.0
PFCR-2	04/22/21	7.0	<2.0	<2.0	<2.0	6.7	4.6	<2.0	<2.0
PFCR-2 M	06/30/20	3.4	<2.0	<2.0	<2.0	3.4	<2.0	<2.0	<2.0
PFCR-2 M	07/30/20	4.2	<2.0	<2.0	<2.0	3.0	<2.0	<2.0	<2.0
PFCR-2 M	08/27/20	5.2	<2.0	<2.0	<2.0	3.6	2.1	<2.0	<2.0
PFCR-2 M	09/24/20	10	<2.0	<2.0	2.3	5.7	3.4	<2.0	<2.0
PFCR-2 M	10/15/20	17	2.0	<2.0	3.8	7.5	5.0	2.4	<2.0
PFCR-2 M	11/19/20	14	<2.0	<2.0	4.0	7.3	4.6	<2.0	<2.0
PFCR-2 M	12/17/20	14	<2.0	<2.0	4.0	7.3	4.6	2.0	<2.0
PFCR-2 M	03/25/21	14	3.2	<2.0	5.6	6.7	4.1	2.3	<2.0

Notes:

1. Montebello Land & Water Company Well #7 (WRD ID = 200059)
2. Only PFAS compounds with detections in the 2020-2021 Treatment Pilot Study influent samples are shown in this table. Samples were analyzed for 18 PFAS compounds in total.

Abbreviations:

PFAS = Per- and polyfluoroalkyl substances
 ng/L = nanograms per liter (or ppt = parts per trillion)
 IX = ion exchange

M = midpoint sample (located approximately one-third down the column length)
 MTBLW = Montebello Land & Water Company
 < = not detected at or above the reporting limit shown

Table 6: Bacterial Testing Results
MTBLW Well #7
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Sample ID	Sample Date	18 Hour E. Coli Confirmed (Large Wells)	18 Hour E. Coli Confirmed (Small Wells)	18 Hour Total Coliform Confirmed (Large Wells)	18 Hour Total Coliform Confirmed (Small Wells)	E. Coli Bacteria	E. Coli Bacteria	Heterotrophic Plate Count	Total Coliform Bacteria	Total Coliform Bacteria
		PW	PW	PW	PW	P/A	MPN/100 mL	CFU/mL	P/A	MPN/100 mL
MB-INF-20200730	07/30/20	ND	ND	ND	ND	Absent	<1.0	790	Absent	<1.0
MB-EFF-20200730	07/30/20	ND	ND	ND	ND	Absent	<1.0	910	Absent	<1.0

Abbreviations:

- E. Coli = Escherichia coli bacteria (intestinal bacteria), a type of coliform bacteria.
- PW = positive wells
- P/A = presence or absence
- MPN/100mL = most probable number per 100 milliliters
- CFU/mL = colony forming units per milliliter
- ND = not detected
- MTBLW = Montebello Land & Water Company

**Table 7: Life Cycle Cost Analysis for Full Scale
 MTBLW Well #7**
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Item	GAC				IX Resin			
	Filtrisorb 400	AV 1240 LDX	AV 1240 Coal Base	AV 1240 PFAS	PSR2 Plus IX	PFGR-2 IX	SIR-110-HP	PFA694E
Capital Costs								
Train Design Flow Rate (gpm) (each lead-lag)	750	750	750	750	1500	1500	1500	1500
Number of Trains (two vessels per train)	2	2	2	2	1	1	1	1
Capital Cost Excluding Media and Common Items (\$/system)	\$444,000	\$444,000	\$444,000	\$444,000	\$422,000	\$422,000	\$422,000	\$422,000
Media Density (lbs/ft3)	33.7	25	31.2	28.7	43	43	41	42
Bed Volume (ft3) (per vessel)	1,003	1,003	1,003	1,003	501	501	501	501
Bed Volume (gal)	7,502	7,502	7,502	7,502	3,747	3,747	3,747	3,747
Media Per Vessel (lb GAC / CF IX)	33,801	25,075	31,294	28,786	501	501	501	501
Unit Media Cost (\$/lb GAC / \$/CF IX)	\$1.75	\$1.55	\$1.65	\$1.90	\$275	\$275	\$310	\$275
Media Bed Cost (\$/vessel)	\$59,152	\$38,866	\$51,634	\$54,694	\$138,000	\$138,000	\$155,000	\$138,000
Number of Bed Volumes of Media	6	6	6	6	2	2	2	2
Total System Equipment Capital Cost (\$)	\$977,000	\$977,000	\$977,000	\$977,000	\$465,000	\$465,000	\$465,000	\$465,000
Total Media Capital Cost (\$)	\$390,000	\$257,000	\$341,000	\$361,000	\$304,000	\$260,000	\$341,000	\$304,000
Installation Cost (\$) (only vessels and associated piping)	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000
Total Capital Cost (\$)	\$1,377,000	\$1,243,000	\$1,327,000	\$1,347,000	\$777,000	\$733,000	\$815,000	\$777,000
O&M Costs								
Media								
EBCT (min)	10	10	10	10	2.5	2.5	2.5	2.5
Treatment Rate (BV/hr)	6	6	6	6	24	24	24	24
Adjusted Estimated Life (BVs)	54,000	41,000	40,500	33,900	675,000	500,000	520,000	381,000
Estimated Bed Life (Months)	12.5	9.5	9.4	7.8	39.0	28.9	30.1	22.0
Media Changeout Volume (CF)	2,006	2,006	2,006	2,006	501	501	501	501
Media Changeout Weight (tons)	33.8	25.1	31.3	28.8	10.8	10.8	10.3	10.5
Unit Cost of Changeout Media (\$/lb GAC / \$/CF IX) ¹	\$1.20	\$1.06	\$1.13	\$1.30	\$275	\$275	\$310	\$275
Media Cost (\$/Changeout)	\$81,000	\$78,000	\$103,000	\$109,000	\$138,000	\$138,000	\$155,000	\$138,000
Spent Media Disposal								
Transportation and Disposal Cost (\$/Changeout)	Included in changeout price	Included in changeout price	Included in changeout price	Included in changeout price	\$14,000	\$14,000	\$18,000	\$18,000
Pumping Costs Based on Head Loss								
Annual Cost/System (\$)	\$2,106	\$2,106	\$2,106	\$2,106	\$11,330	\$11,330	\$11,330	\$11,330
Annual Total Cost (\$)	\$4,212	\$4,212	\$4,212	\$4,212	\$11,330	\$11,330	\$11,330	\$11,330

**Table 7: Life Cycle Cost Analysis for Full Scale
 MTBLW Well #7**
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Item	GAC				IX Resin			
	Filtrisorb 400	AV 1240 LDX	AV 1240 Coal Base	AV 1240 PFAS	PSR2 Plus IX	PFCR-2 IX	SIR-110-HP	PFA694E
Life Cycle Costs								
Total Installed Capital Costs	\$1,380,000	\$1,240,000	\$1,330,000	\$1,350,000	\$777,000	\$733,000	\$815,000	\$777,000
20-Year Total O&M	\$1,630,000	\$1,330,000	\$1,850,000	\$2,330,000	\$1,220,000	\$1,380,000	\$1,550,000	\$1,920,000
20-Year Net Present Value	\$2,700,000	\$2,400,000	\$2,850,000	\$3,260,000	\$1,760,000	\$1,850,000	\$2,080,000	\$2,350,000
Life Cycle Cost (\$/1000 gallons)	\$0.17	\$0.15	\$0.18	\$0.21	\$0.11	\$0.12	\$0.13	\$0.15
Life Cycle Cost (\$/acre-ft gallons)	\$55.80	\$49.64	\$58.84	\$67.40	\$36.34	\$38.23	\$43.02	\$48.64

Abbreviations:

MTBLW = Montebello Land & Water Company lbs = pounds EBCT = empty bed contact time
 MGD = mega gallons per day gal = gallons CF = cubic feet
 gpm = gallons per minute BV = Bed Volume

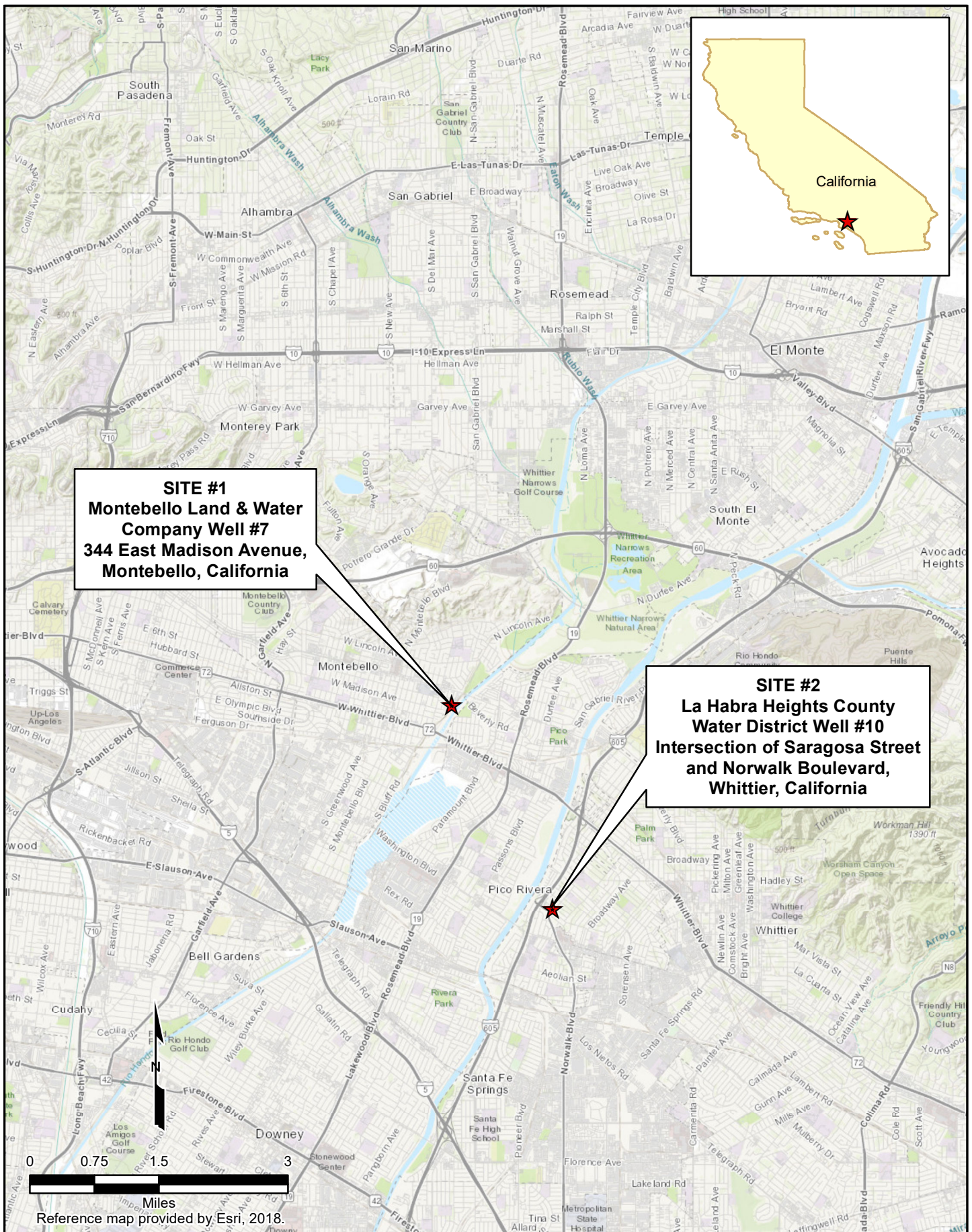
Notes:

- The unit cost for changeout GAC is assumed to be approximately 70% of the virgin GAC cost and includes service fees, warehousing of "swing loads," and reactivation.
 The design flow rate is 1,500 gpm.
 Changeout trigger is assumed to be the PFOA RL.
 The interest rate is assumed to be 3% and the discount rate is assumed to be 5%.
 A tax rate of 10% was applied to equipment and virgin media (not applied to regenerated media).

**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED
CARBON TO TREAT GROUNDWATER IMPACTED WITH
PER- AND POLYFLUOROALKYL SUBSTANCES
MONTEBELLO LAND & WATER COMPANY – WATER SUPPLY WELL #7**

Figures

- Figure 1 Pilot Test Site Vicinity Map*
- Figure 2 Pilot Test Site Map*
- Figure 3 Pilot Test Manifold Piping and Instrumentation Diagram*
- Figure 4 PFOA GAC Breakthrough Curves*
- Figure 5 PFOS GAC Breakthrough Curves*
- Figure 6 PFOA IX Breakthrough Curves*
- Figure 7 PFOS IX Breakthrough Curves*
- Figure 8 GAC PFOA Breakthrough Estimation Curves*
- Figure 9 IX PFOA Breakthrough Estimation Curves*
- Figure 10 Bed Life Sensitivity Analysis*



GSI Job No.	5302	Drawn by:	AV
Issued:	17-Aug-2021	Chk'd by:	MJ
Revised:		Apr'd by:	PEG
Map ID:	WRDPFAS_SiteLocMap	FIGURE 1	

SITE LOCATIONS MAP

PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

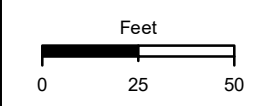


LEGEND

- Montebello Land & Water Company (MTBLW) Water Supply Well Location
- Pilot Test Well

Note

Aerial image provided by Google Earth Pro, March 2018.



Projected Coordinate System
 Datum: NAD 83
 State Plane California Zone V
 Units: Feet

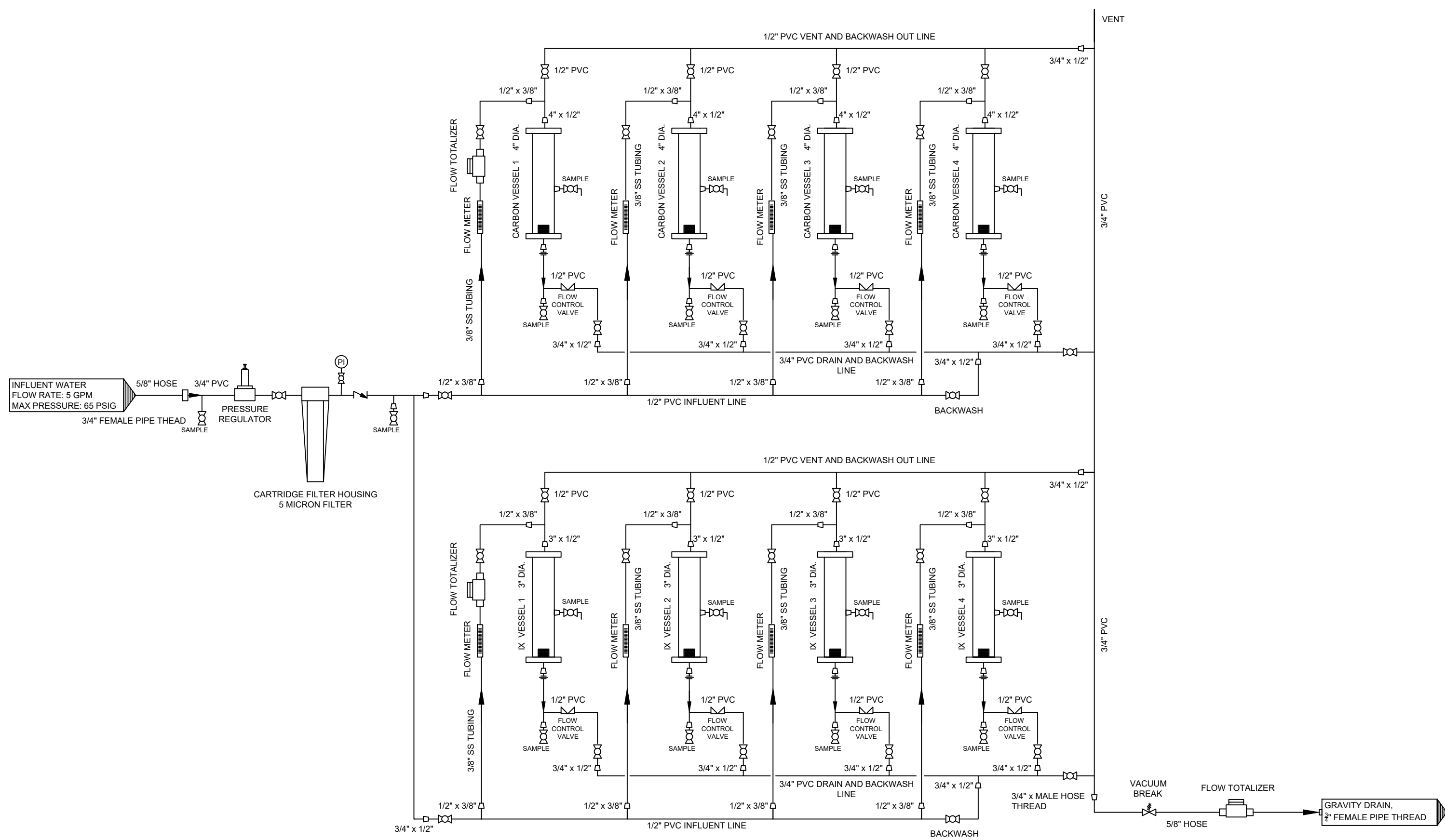


MONTEBELLO LAND & WATER COMPANY WELL #7
344 EAST MADISON AVENUE
MONTEBELLO, CALIFORNIA

PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

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Issued:	17-Aug-2021	Chk'd By:	MJ
Map ID:	WRDPFAS_MONTLW	Appv'd By:	PEG

FIGURE 2



SYSTEM NOTES

1. TEST VESSELS: 3" AND 4" CLEAR PVC X 5' LENGTH
2. IX RESIN BED: 3" DIA., 2.4' DEPTH
3. CARBON MEDIA BED: 4" DIA., 4' DEPTH
4. FLOW RATE THROUGH TEST VESSELS:
 - 4.1. IX VESSELS: 0.72 GPM EACH
 - 4.2. CARBON VESSELS: 0.25 GPM EACH

PIPING AND INSTRUMENTATION DIAGRAM PROVIDED BY AQUEOUS VETS, DATED 17 FEBRUARY 2020.

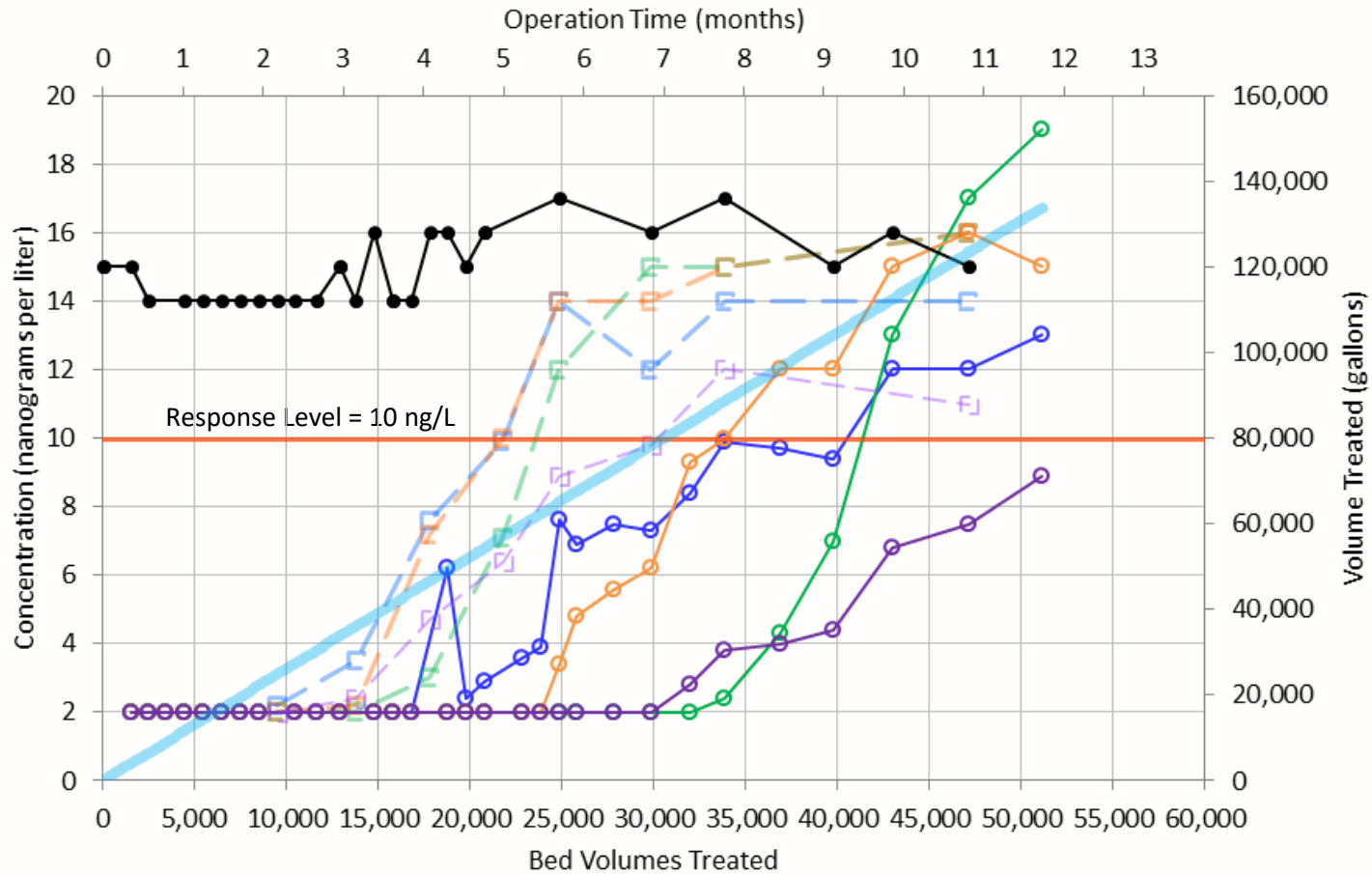


GSI ENVIRONMENTAL INC.
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GSI Job No:	5302	Drawn By:	BMV
Issued:	17-Aug-2021	Chk'd By:	RDT
Revised:	--	Apr'd By:	PEG
Scale:	NOT TO SCALE	FIGURE 3	

PILOT TEST MANIFOLD
PIPING AND INSTRUMENTATION DIAGRAM
MONTEBELLO LAND & WATER COMPANY WELL #7
 WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA
 4040 Paramount Blvd.
 Lakewood, California 90712

MTBLW Well #7 - Perfluorooctanoic acid (PFOA) GAC Samples



Notes:

1. The influent PFOA concentration from Day 26 (May 19, 2020) was anomalously low at 5.9 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021
3. "M" on treatment samples indicates mid-point sample.
4. F400 = Filtrasorb 400; GAC = granular activated carbon.
5. MTBLW = Montebello Land and Water Company.

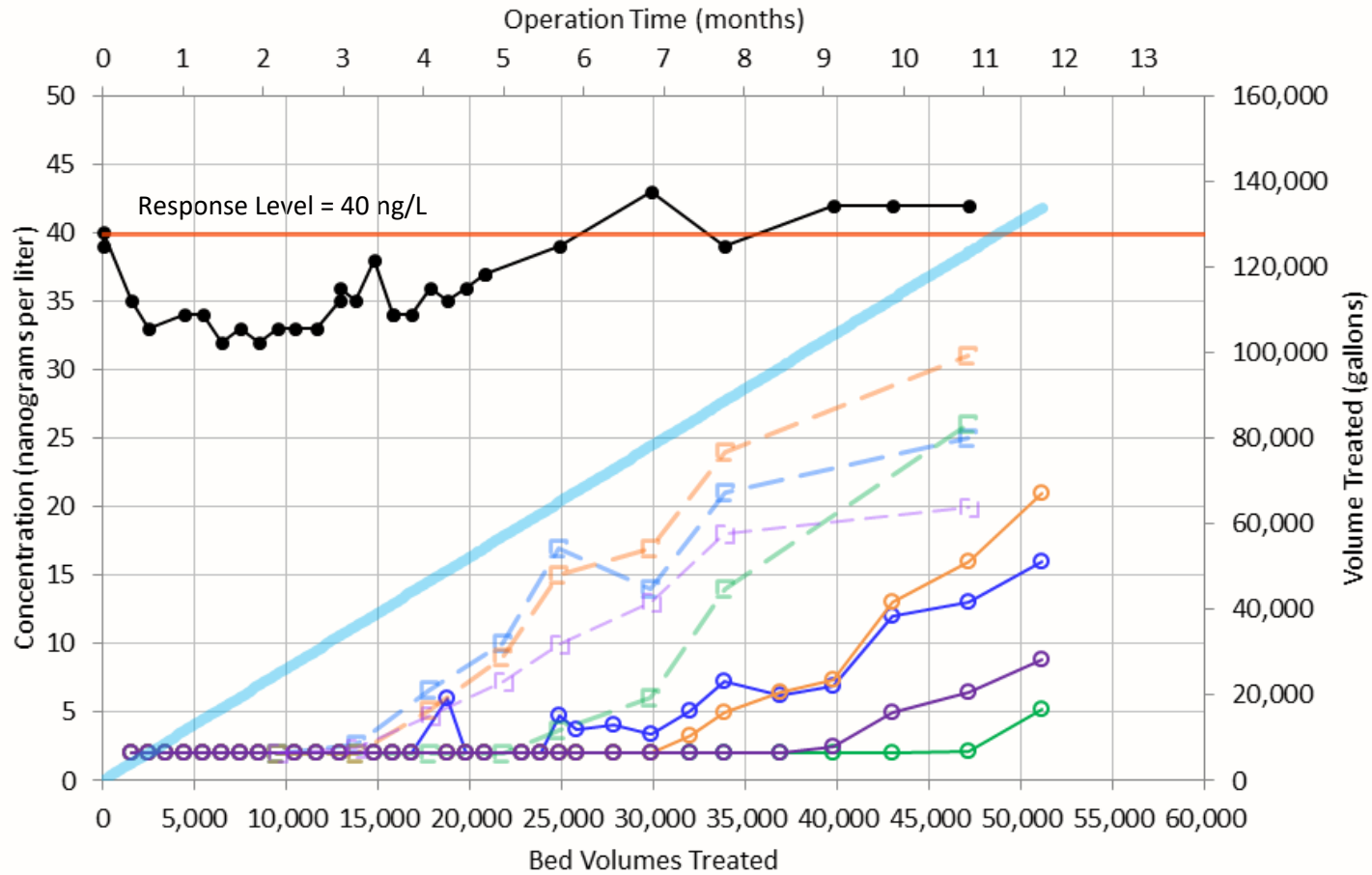
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- AV1240CB M
- AV1240LDX
- AV1240LDX M
- AV1240FPAS
- AV1240FPAS M
- F400
- F400 M
- Influent
- Water Volume Treated



GSI Job No. 5302	Drawn By: GM
Issued: 17-Aug-21	Chk'd By: MJ
Revised:	Apr'd By:
Scale:	Figure 4

MTBLW WELL #7
PFOA GAC BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluorooctanesulfonic acid (PFOS) GAC Samples



Notes:

1. Influent PFOS concentration from Day 26 (May 19, 2020) was anomalously low at 13 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021
3. "M" on treatment samples indicates mid-point sample.
4. F400 = Filtrasorb 400; GAC = granular activated carbon.
5. MTBLW = Montebello Land and Water Company.

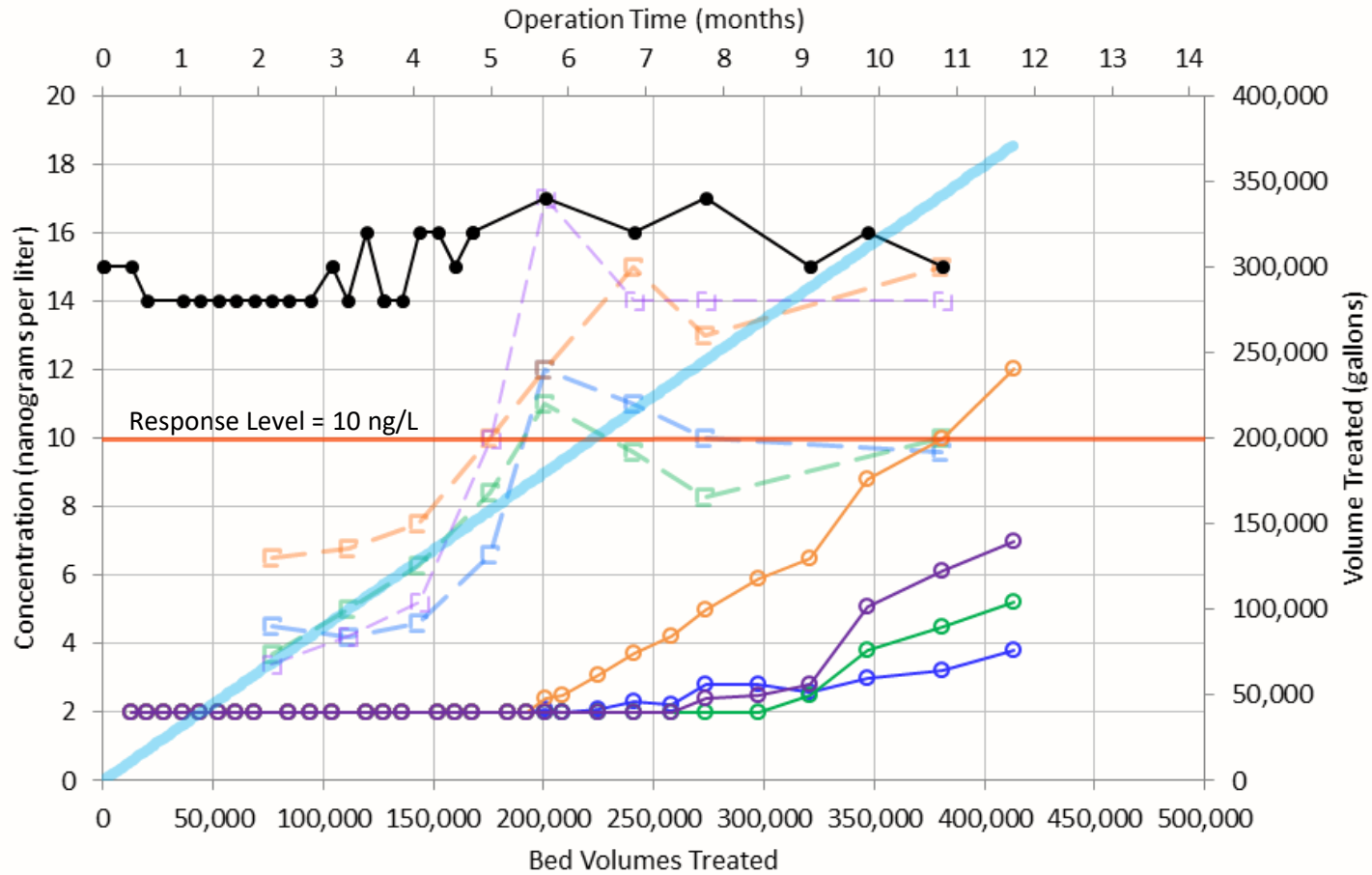
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- AV1240CB M
- AV1240LDX
- AV1240LDX M
- AV1240FPAS
- AV1240FPAS M
- F400
- F400 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	17-Aug-21	Chk'd By:	MJ
Revised:		Apr'v'd By:	
Scale:		Figure 5	

MTBLW WELL #7
PFOS GAC BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluorooctanoic acid (PFOA) IX Samples



Notes:

1. The influent PFOA concentration from Day 26 (May 19, 2020) was anomalously low at 5.9 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021.
3. "M" on treatment samples indicates mid-point sample.
4. IX = ion exchange.
5. MTBLW = Montebello Land and Water Company.

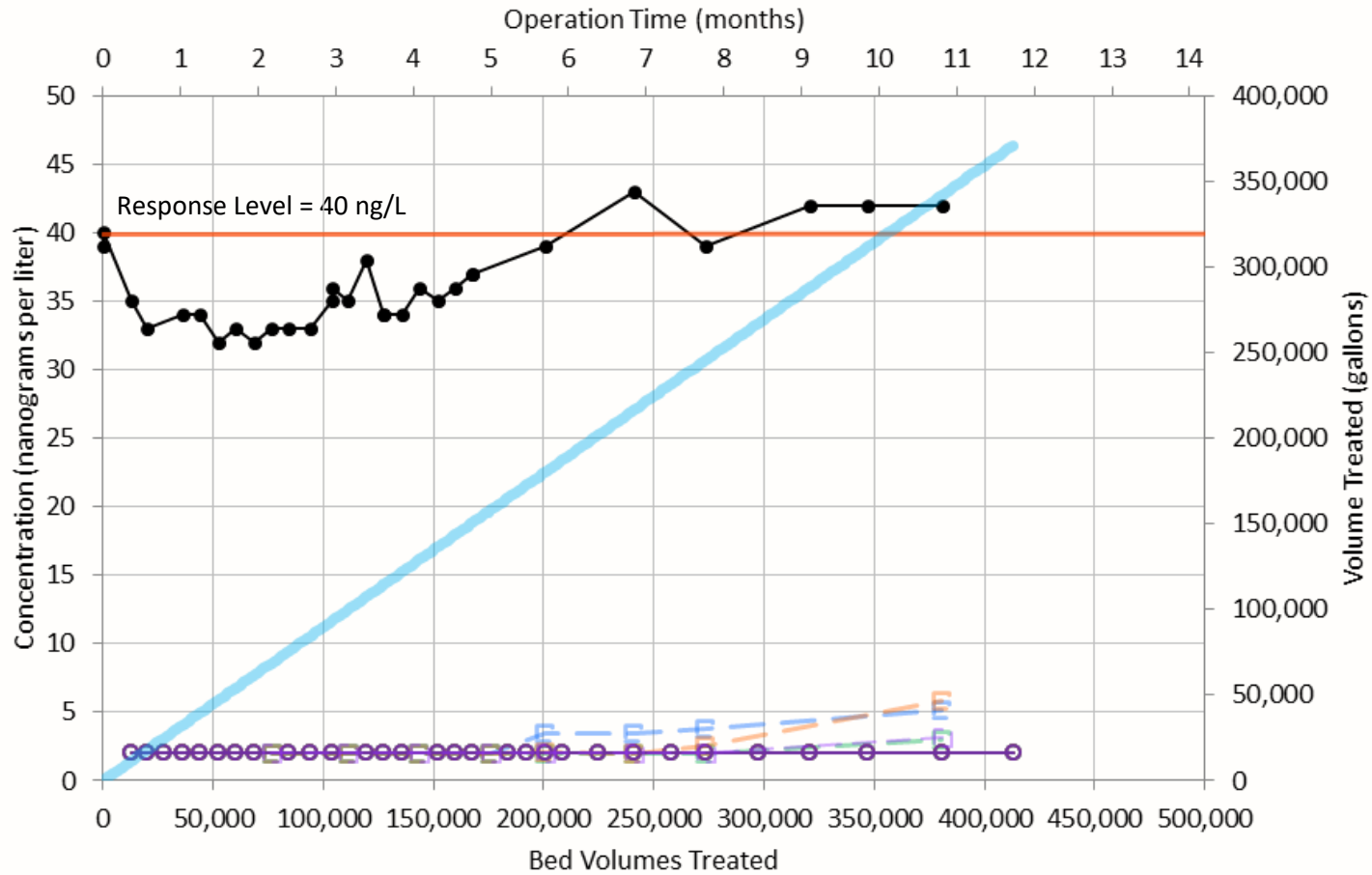
- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	17-Aug-21	Chk'd By:	MJ
Revised:		Apr'd By:	
Scale:		Figure 6	

MTBLW WELL #7
PFOA IX BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluorooctanesulfonic acid (PFOS) IX Samples



Notes:

1. Influent PFOS concentration from Day 26 (May 19, 2020) was anomalously low at 13 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021.
3. "M" on treatment samples indicates mid-point sample.
4. IX = ion exchange.
5. MTBLW = Montebello Land and Water Company.

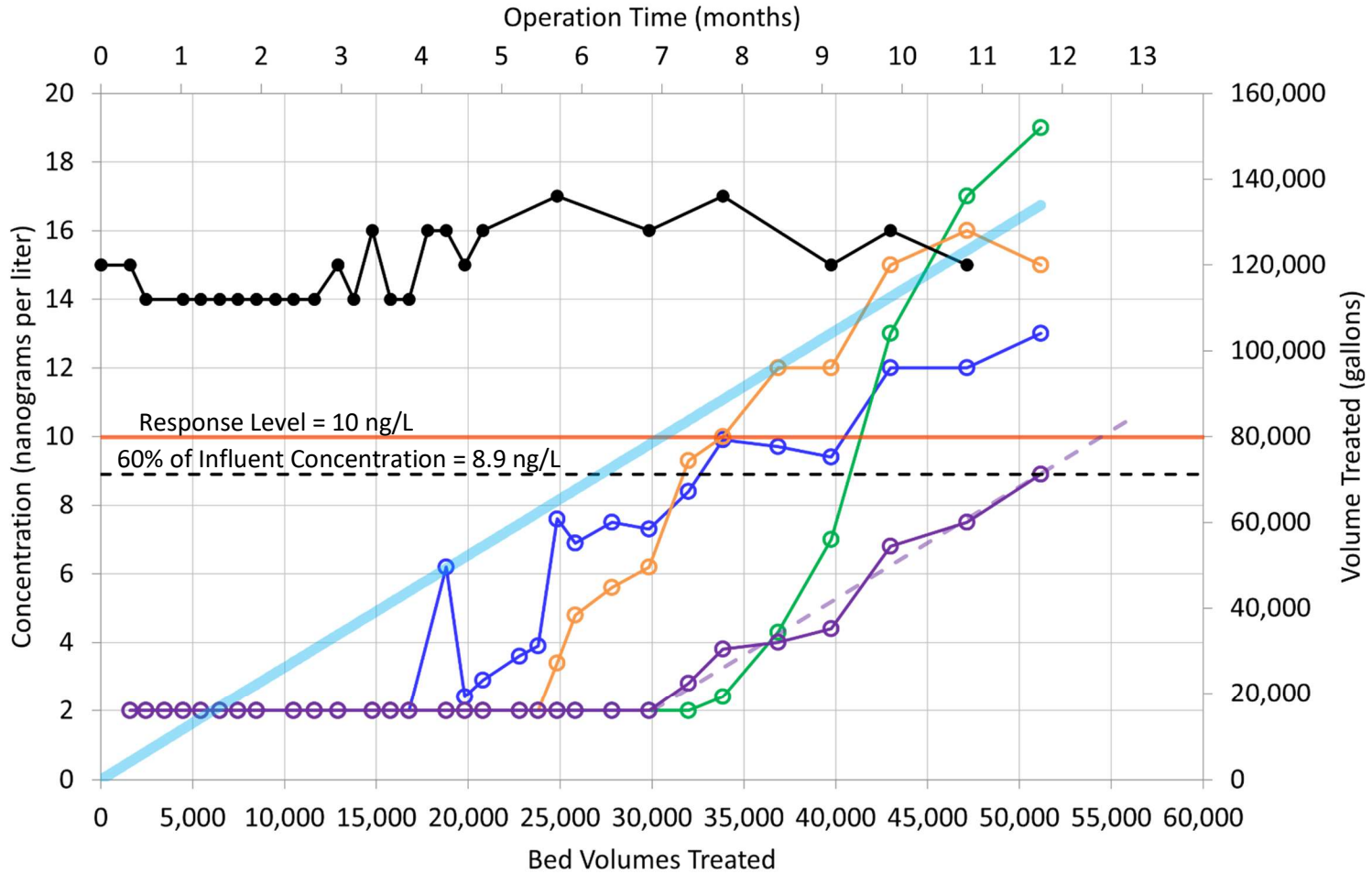
- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	17-Aug-21	Chk'd By:	MJ
Revised:		Apr'd By:	
Scale:		Figure 7	

MTBLW WELL #7
PFOS IX BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluorooctanoic acid (PFOA) GAC Samples



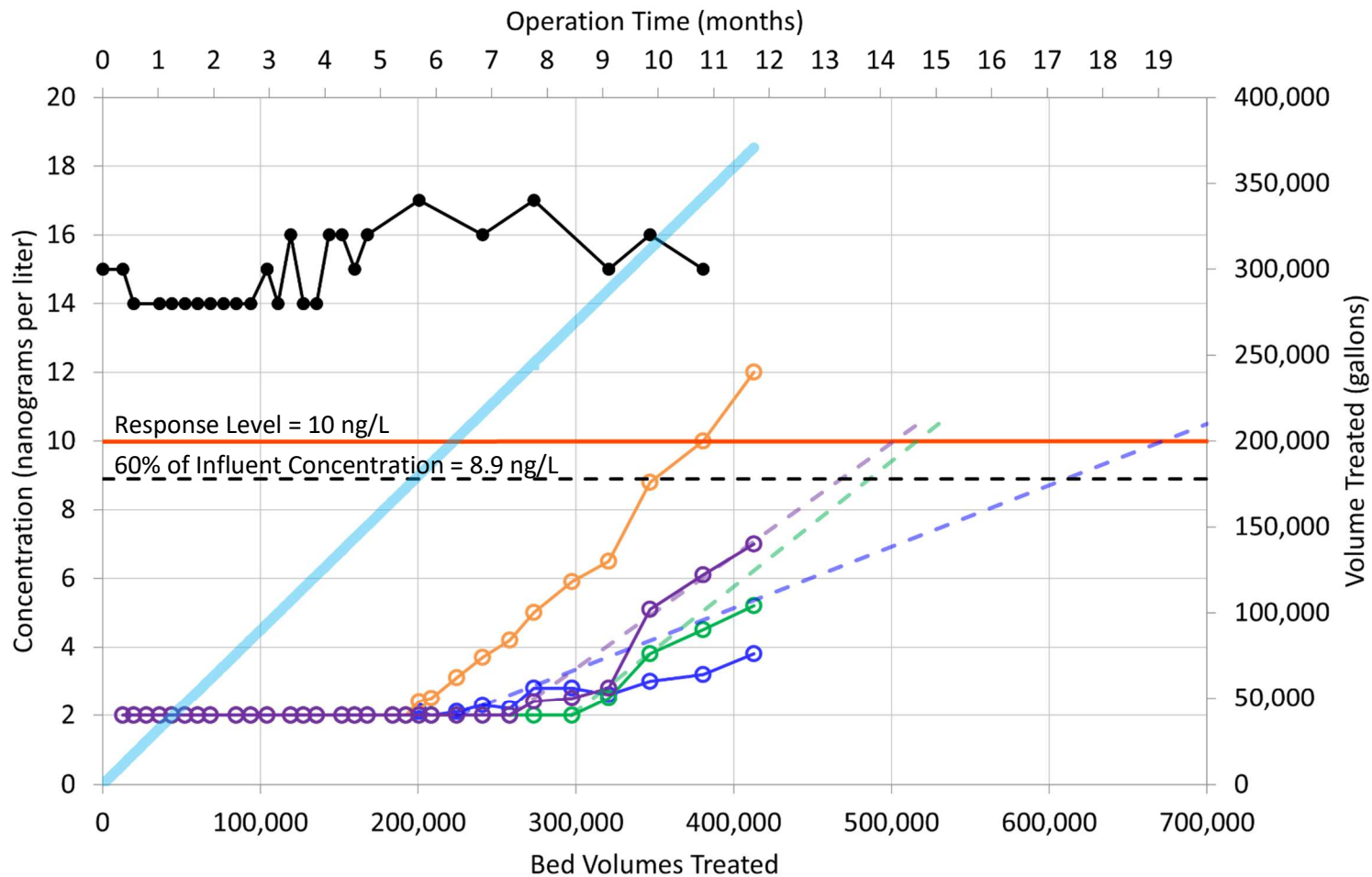
Notes:

1. The influent PFOA concentration from Day 26 (May 19, 2020) was anomalously low at 5.9 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021
3. F400 = Filtrasorb 400; GAC = granular activated carbon.
4. MTBLW = Montebello Land and Water Company.

- AV1240CB
- F400
- AV1240LDX
- - F400 Estimated Breakthrough
- AV1240PFAS
- Influent
- Water Volume Treated

	GSI Job No. 5302	Drawn By: GM	MTBLW WELL #7 GAC PFOA BREAKTHROUGH ESTIMATION CURVES <small>PFAS Treatment Pilot Study Water Replenishment District of Southern California</small>
	Issued: 31-Aug-21	Chk'd By: MJ	
	Revised:	Aprv'd By:	
	Scale:	Figure 8	

MTBLW Well #7 - Perfluorooctanoic acid (PFOA) IX Samples



Notes:

1. The influent PFOA concentration from Day 26 (May 19, 2020) was anomalously low at 5.9 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021.
3. IX = ion exchange.
4. MTBLW = Montebello Land and Water Company.

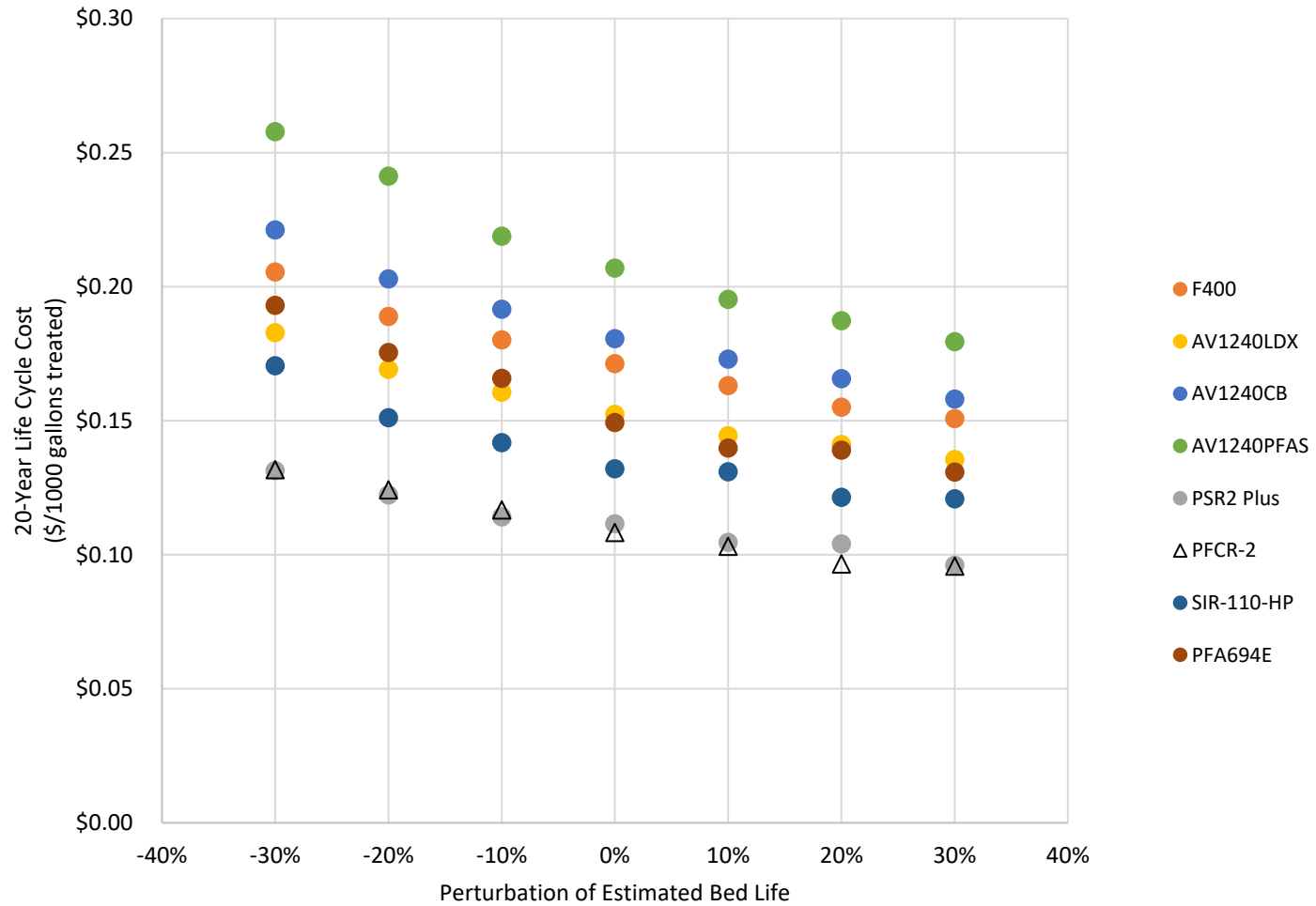
- PSR2 Plus
- PFA694E
- - - PSR2 Plus Estimated Breakthrough
- SIR-110-HP
- PFCR-2
- - - SIR-110-HP Estimated Breakthrough
- - - PFCR-2 Estimated Breakthrough
- Influent
- - - Water Volume Treated



GSI Job No. 5302	Drawn By: GM
Issued: 31-Aug-21	Chk'd By: MJ
Revised:	Aprv'd By:
Scale:	Figure 9

MTBLW WELL #7 IX PFOA BREAKTHROUGH ESTIMATION CURVES

PFAS Treatment Pilot Study
Water Replenishment District of Southern California



Notes:
 1. F400 = Filtrasorb 400.
 2. MTBLW = Montebello Land and Water Company.



GSI Job No.	5302	Drawn By:	GM
Issued:	31-Aug-21	Chk'd By:	MJ
Revised:		Apr'd By:	
Scale:		Figure 10	

MTBLW WELL #7
BED LIFE SENSITIVITY ANALYSIS
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED
CARBON TO TREAT GROUNDWATER IMPACTED WITH
PER- AND POLYFLUOROALKYL SUBSTANCES
MONTEBELLO LAND & WATER COMPANY – WATER SUPPLY WELL #7**

Appendices

**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED
CARBON TO TREAT GROUNDWATER IMPACTED WITH
PER- AND POLYFLUOROALKYL SUBSTANCES
MONTEBELLO LAND & WATER COMPANY – WATER SUPPLY WELL #7**

Appendix A

Ion Exchange and Carbon Media Manufacturers' Specifications



AV 1240 Coal Base Granular Activated Carbon

Application:

This activated carbon is made from bituminous coal. This type is mainly used for purification of ground water, well water, treating water for industrial water treatment, waste water treatment, decolorizing, deodorizing and recycling water systems. This Coal Base Activated Carbon meets NSF-61 for treatment of potable water and all municipal water treatment use.

Specification:

		Test Methods
Mesh Size	12 x 40 Larger than #12, 5% max Smaller than #40, 4% max	ASTM D2862
Effective Size:	0.55-0.75 mm	
Uniformity Coefficient:	1.9 max	
Moisture Content	5% max	
Hardness	90% min	ASTM D3802
Abrasion Number	80	AWWA-B604
Iodine No.	900-1000 mg/gm	ASTM D4607
Density	0.46-0.54 g/cc	ASTM D2864

Packaging:

Standard Packaging: 28 or 55 lb polypropylene bags, 200 lb fiber drums, and 1100 lb,. super sacks are available.

Notes:

The above specification can be adjusted in accordance with the customer's requirements.



AV1240 LDX Granular Activated Carbon

Application:

AV1240 LDX is a virgin granular activated carbon produced from coal through a proprietary high-temperature activation process under stringent quality control.

- Designed for many liquid phase applications to remove small and large organic molecules such as color bodies, TOC, and other impurity compounds
- Well suited for removal of perfluoroalkyl substances such as PFOS and PFOA from water
- Applicable to glycerin decolorizing and purification
- High adsorption capacity
- Meets US Food Chemicals Codex (FCC) standards
- Certified to ANSI / NSF 61

Specification:

		Test Methods
Mesh Size	12 x 40 Larger than #12, 5% max Smaller than #40, 5% max	ASTM D2862
Moisture Content	5% max	
Hardness	93% min	ASTM D3802
Abrasion Number	Min. 75	AWWA-B604
Iodine No.	Min 1000 mg/gm	ASTM D4607
Density	0.36-0.44 g/cc	ASTM D2864

Packaging:

Standard packing is 44 lb. bags or 880 lb. bulk sacks.

Notes:

The above specification can be adjusted in accordance with customer's requirements.



AV1240 PFAS Granular Activated Carbon

Application:

AV1240 PFAS is a granular activated carbon designed for treatment of drinking water in municipal applications. The manufacturing process used creates an activated carbon with enhanced properties making it ideal for the removal of contaminants including: disinfection byproduct precursors (DBPs), perfluorinated compounds (PFCs), pesticides, as well as naturally occurring organic matter and compounds affecting taste and odor. AV1240 PFAS is ANSI/NSF61 Certified.*

Specification:

		Test Methods
Mesh Size	12 x 40 Larger than #12, 5% max Smaller than #40, 4% max	ASTM D2862
Effective Size:	0.55-0.75 mm	
Uniformity Coefficient:	1.7 max	
Moisture Content	5% max	
Hardness	93% min	ASTM D3802
Abrasion Number	Min. 75	AWWA-B604
Iodine No.	Min 1000 mg/gm	ASTM D4607
Density	Min. 0.43 g/cc	ASTM D2864

Packaging:

Standard Packaging: 55 lb polypropylene bags and 1100 lb., super sacks are available.

Notes:

The above specification can be adjusted in accordance with the customer's requirements.

FILTRASORB® 400

Granular Activated Carbon

Applications



FILTRASORB 400 activated carbon can be used in a variety of liquid phase applications for the removal of dissolved organic compounds. FILTRASORB 400 has been successfully applied for over 40 years in applications such as drinking and process water purification, wastewater treatment, and food, pharmaceutical, and industrial purification.

Description

FILTRASORB 400 is a granular activated carbon for the removal of dissolved organic compounds from water and wastewater as well as industrial and food processing streams. These contaminants include taste and odor compounds, organic color, total organic carbon (TOC), industrial organic compounds such as TCE and PCE, and PFAS.

This activated carbon is made from select grades of bituminous coal through a process known as reagglomeration to produce a high activity, durable, granular product capable of withstanding the abrasion associated with repeated backwashing, hydraulic transport, and reactivation for reuse. Activation is carefully controlled to produce a significant volume of both low and high energy pores for effective adsorption of a broad range of high and low molecular weight organic contaminants.

FILTRASORB 400 is formulated to comply with all the applicable provisions of the AWWA Standard for Granular Activated Carbon (B604) and Food Chemicals Codex. This product may also be certified to the requirements of ANSI/NSF Standard 61 for use in municipal water treatment facilities. Only products bearing the NSF Mark are certified to the NSF/ANSI 61 - Drinking Water System Components - Health Effects standard. Certified Products will bear the NSF Mark on packaging or documentation shipped with the product.

Features / Benefits

- Produced from a pulverized blend of high quality bituminous coals resulting in a consistent, high quality product.
- Carbon granules are uniformly activated through the whole granule, not just the outside, resulting in excellent adsorption properties and constant adsorption kinetics.
- The reagglomerated structure ensures proper wetting while also eliminating floating material.
- High mechanical strength relative to other raw materials, thereby reducing the generation of fines during backwashing and hydraulic transport.
- Carbon bed segregation is retained after repeated backwashing, ensuring the adsorption profile remains unchanged and therefore maximizing the bed life.
- Reagglomerated with a high abrasion resistance, which provides excellent reactivation performance.
- High density carbon resulting in a greater adsorption capacity per unit volume.

Specifications¹

FILTRASORB 400

Iodine Number, mg/g	1000 (min)
Moisture by Weight	2% (max)
Effective Size	0.55–0.75 mm
Uniformity Coefficient	1.9 (max)
Abrasion Number	75 (min)
Screen Size by Weight, US Sieve Series	
On 12 mesh	5% (max)
Through 40 mesh	4% (max)

¹Calgon Carbon test method

Typical Properties*

FILTRASORB 400

Apparent Density (tamped)	0.54 g/cc
Water Extractables	<1%
Non-Wetttable	<1%

*For general information only, not to be used as purchase specifications.

Safety Message

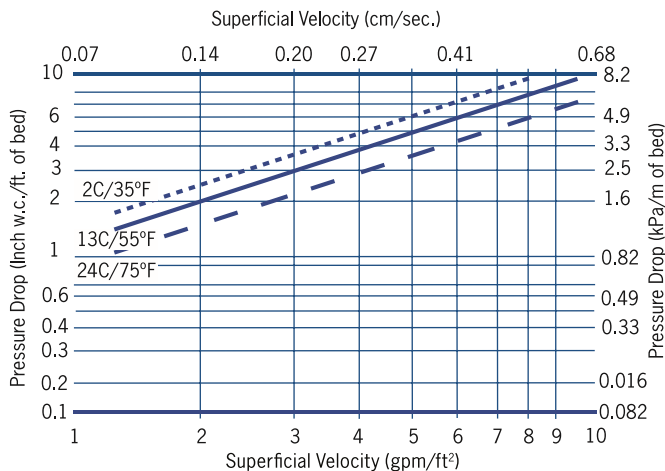
Wet activated carbon can deplete oxygen from air in enclosed spaces. If use in an enclosed space is required, procedures for work in an oxygen deficient environment should be followed.

1.800.4CARBON calgoncarbon.com

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DS-FILTRA40017-EIN-E1

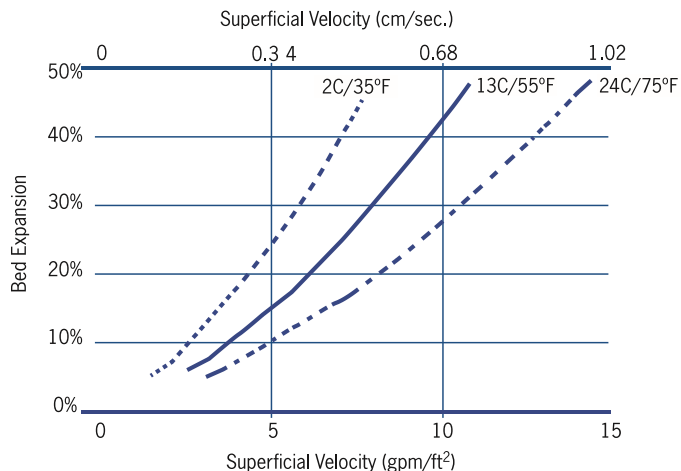
Typical Pressure Drop

Based on a backwashed and segregated bed



Typical Bed Expansion During Backwash

Based on a backwashed and segregated bed



Design Considerations

FILTRASORB 400 activated carbon is typically applied in down-flow packed-bed operations using either pressure or gravity systems. Design considerations for a treatment system is based on the user's operating conditions, the treatment objectives desired, and the chemical nature of the compound(s) being adsorbed.

Safety Message

Wet activated carbon can deplete oxygen from air in enclosed spaces. If use in an enclosed space is required, procedures for work in an oxygen deficient environment should be followed.

1.800.4CARBON calgoncarbon.com

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DS-FILTRA40017-EIN-E1



DOWEX™ PSR2 Plus Cl Ion Exchange Resin

For Selective Removal of Perchlorate from Potable Water

Description

DOWEX™ PSR2 Plus Cl Ion Exchange Resin is a strong base anion exchange resin for the selective removal of perchlorate from potable water.

Designed to offer exceptional selectivity for perchlorate, the gel matrix also helps achieve high capacity while the uniform particle size (UPS) allows operation at lower pressure losses compared to conventional perchlorate removal resins.

Typical Physical and Chemical Properties

Matrix	Styrene-divinylbenzene, gel
Type	Strong base anion
Physical Form	White to yellow spherical beads
Ionic Form as Shipped	Cl ⁻ Form
Total Exchange Capacity	≥ 0.7 eq/L
Water Retention Capacity	25 – 35%
Particle Size	
Particle Diameter ^b	700 ± 50 μm
Uniformity Coefficient	≤ 1.1
< 300 μm	1% max
Particle Density	1.07 g/mL
Bulk Density, as Shipped ^c	690 g/L (43 lb/ft ³)

^b For additional particle size information, please refer to the [Particle Size Distribution Cross Reference Chart](#) (Form No. 177-01775).

^c As per the backwashed and settled density of the resin, determined by ASTM D-2187.

Suggested Operating Conditions

Maximum Operating Temperature	60°C (140°F)
pH Range	0 – 14
Bed Depth, min.	1000 mm (3.1 ft)
Typical Service Flowrate	4 – 64 BV*/h (0.5 – 8 gpm/ft ³)
Typical Linear Velocity	12 – 54 m/h (5 – 22 gpm/ft ²)

* 1 BV (Bed Volume) = 1 m³ solution per m³ resin or 7.5 gal per ft³ resin

Please contact your Dow representative for system design and application testing details.

Commissioning and Limits of Use

DOWEX™ PSR2 Plus CI Resin is suitable for use in potable water applications after an initial commissioning pretreatment at ambient temperature.

Note

These resins may be subject to drinking water application restrictions in some countries.

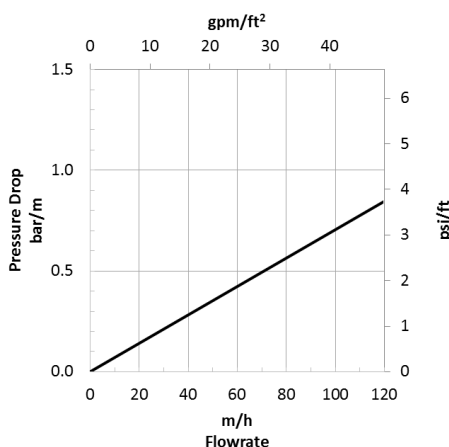
Please check the application status before use and sale.

Hydraulic Characteristics

Pressure drop data for DOWEX™ PSR2 Plus CI Resin as a function of service flowrate at 20°C (68°F) is shown in Figure 1. The pressure drop for other water temperatures can be calculated with the provided equations. Pressure drop data are valid at the start of the service run with clean water and a correctly classified bed.

Figure 1: Pressure Drop

Temperature = 20°C (68°F)



For other temperatures use:

$$P_T = P_{20^\circ\text{C}} / (0.026 T_{\text{C}} + 0.48), \text{ where } P \equiv \text{bar/m}$$

$$P_T = P_{68^\circ\text{F}} / (0.014 T_{\text{F}} + 0.05), \text{ where } P \equiv \text{psi/ft}$$

Packaging

- 5-ft³ (0.14-m³) fiber drums
- 1000-L (264-gal) super sacks

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products—from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

For more information, contact our Customer Information Group:

Asia Pacific	+86 21 3851 4988
Europe, Middle East, Africa	+31 115 672626
Latin America	+55 11 5184 8722
North America	1-800-447-4369

www.dowwaterandprocess.com

WARNING: Oxidizing agents such as nitric acid attack organic ion exchange resins under certain conditions. This could lead to anything from slight resin degradation to a violent exothermic reaction (explosion). Before using strong oxidizing agents, consult sources knowledgeable in handling such materials.

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

All information set forth herein is for informational purposes only. This information is general information and may differ from that based on actual conditions. Please note that physical properties may vary depending on certain conditions and while operating conditions stated in this document are intended to lengthen product lifespan and/or improve product performance, it will ultimately depend on actual circumstances and is in no event a guarantee of achieving any specific results. Nothing in this document should be treated as a warranty by Dow.



RESINTECH SIR-110-HP is a chloride form PFAS, nitrate and perchlorate selective strong base anion resin. SIR-110-HP has unique functionality that greatly increases selectivity for nitrate while greatly decreasing the interference from sulfate ions. RESINTECH SIR-110-HP has the highest possible selectivity for perchlorate when compared to other similar resins. SIR-110-HP is intended for all perchlorate and PFAS removal applications, and where the highest possible affinity for nitrate is desired. SIR-110-HP is supplied in the chloride form.



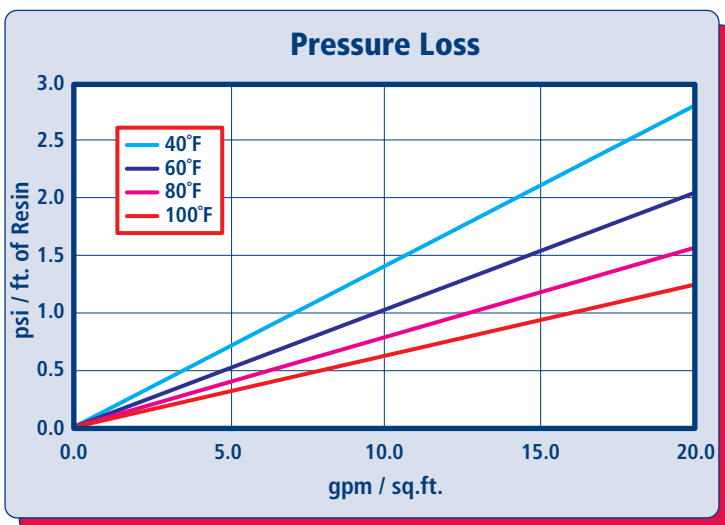
C US
**NSF/ANSI-61 CERTIFIED FOR
MATERIAL SAFETY**

FEATURES & BENEFITS

- **HIGHEST OPERATING CAPACITY OF ANY PERCHLORATE AND PFAS SELECTIVE RESIN**
Highly selective for perchlorate, PFAS and nitrate
- **LOW SULFATE SELECTIVITY**
The unique functional group eliminates the possibility of nitrate dumping
- **SUPERIOR PHYSICAL STABILITY**
90% plus sphericity and high crush strengths together with carefully controlled particle distribution provides long life and low pressure drop
- **CONTROLLED PARTICLE SIZE**
16 to 50 mesh size provides a low pressure drop and superior kinetics

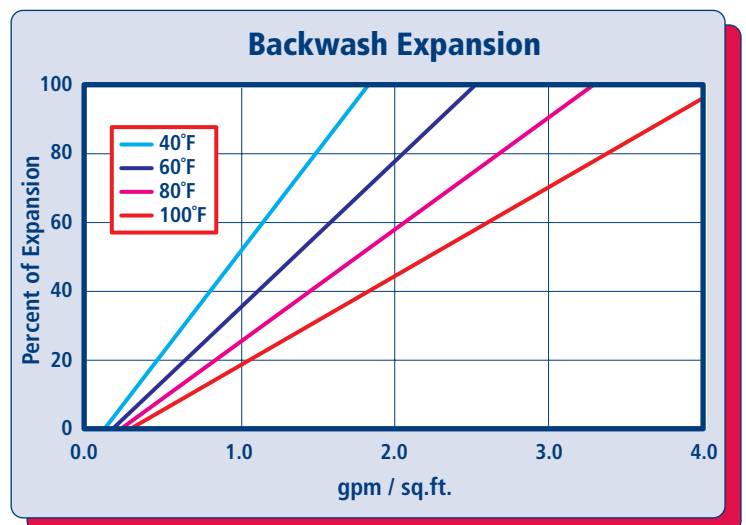
NSF/ANSI-61 compliance requires conditioning with a minimum 20 bed volume rinse prior to first use.

HYDRAULIC PROPERTIES



PRESSURE LOSS

The graph above shows the expected pressure loss of ResinTech SIR-110-HP per foot of bed depth as a function of flow rate at various temperatures.



BACKWASH

The graph above shows the expansion characteristics of ResinTech SIR-110-HP as a function of flow rate at various temperatures.

RESINTECH® SIR-110-HP

PHYSICAL PROPERTIES

Polymer Structure	Styrene/DVB
Functional Group	Tributylamine
Physical Form	Spherical beads
Ionic Form as shipped	Chloride
Total Capacity Chloride form	>0.7 meq/mL
Water Retention Chloride form	38 to 50 percent
Approximate Shipping Weight Chloride form	41 lbs./cu.ft.
Screen Size Distribution (U.S. mesh)	20 to 50
Maximum Fines Content (<50 mesh)	1.5 percent
Minimum Sphericity	90 percent
Uniformity Coefficient	1.6 approx.
Resin Color	White to tan

Note: Physical properties can be certified on a per lot basis, available upon request

SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature Chloride form	170°F
Minimum bed depth	24 inches
Backwash expansion	25 to 50 percent
Maximum pressure loss	20 psi
Operating pH range	4 to 10 SU
Regenerant Concentration Salt cycle	5 to 10 percent NaCl
Regenerant level	>10 lbs./cu.ft.
Regenerant flow rate	0.25 to 1.0 gpm/cu.ft.
Regenerant contact time	>30 minutes
Displacement flow rate	Same as dilution flow
Displacement volume	10 to 15 gallons/cu.ft.
Rinse flow rate	Same as service flow
Rinse volume	35 to 60 gallons/cu.ft.
Service flow rate	1 to 3 gpm/cu.ft.

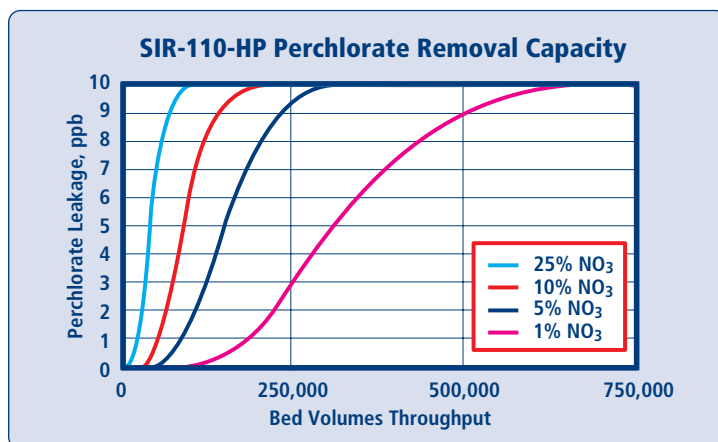
Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums.

For operation outside these guidelines, contact ResinTech Technical Support

APPLICATIONS

PFAS REMOVAL

ResinTech SIR-110-HP can be used for removal of various PFAS compounds, including PFOA and PFOS, from water. Testing has shown it can remove a wide range of other PFAS species in addition to these compounds. Ion exchange offers the benefit of reduced contact times and longer throughputs vs. conventional activated carbon treatment. An understanding of the influent water chemistry is needed for thorough review. Levels of TOC, VOC and individual PFAS compounds are needed in addition to the basic background water chemistry (chloride, sulfate, alkalinity, etc.). Any other contaminants that may be present are also needed to determine impact on PFAS removal (uranium, perchlorate, chromate, arsenic, etc.).



Capacity chart is based on waters with inlet conditions of 10 ppb ClO₄, TDS less than 500 ppm, and is for perchlorate alone, exclusive of other anions. No engineering downgrade has been applied.

PERCHLORATE REMOVAL

ResinTech SIR-110-HP is ideal for single use perchlorate removal applications and is a cost effective method to remove trace levels of perchlorate from water. The perchlorate ion is very strongly attracted to the ResinTech SIR-110-HP, so much so that regeneration is impractical or impossible. However, in most cases perchlorate loads to almost the full capacity of the resin, resulting in very long service life and eliminating the need to regenerate and re-use the spent resin.

NITRATE REMOVAL

RESINTECH SIR-110-HP can be used in the chloride form to remove nitrates as well as perchlorates from potable water. SIR-110-HP has higher capacity for nitrate than SIR-100-HP in high TDS waters. When treating waters with high hardness the brine dilution and displacement waters should be softened and a low hardness salt used to prevent scaling. Regeneration, although possible, can be complicated, and may require special brining techniques or brine dosages.

CAUTION: DO NOT MIX ION EXCHANGE RESIN WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials, such as ion exchange resins.

MATERIAL SAFETY DATA SHEETS (MSDS) are available for all ResinTech Inc. products. To obtain a copy, contact your local ResinTech sales representative or our corporate headquarters. They contain important health and safety information. That information may be needed to protect your employees and customers from any known health and safety hazards associated with our products. We recommend that you secure and study the pertinent MSDS for our products and any other products being used. These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.

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SIR-110-HP rev 1.4

PRODUCT DATA SHEET

Purofine® PFA694E

Polystyrenic Gel, Potable Water
Grade

PRINCIPAL APPLICATIONS

- Removal of perfluoroalkyl substances
- Removal of polyfluoroalkyl substances

ADVANTAGES

- Very high operating capacity
- Excellent kinetics

SYSTEMS

- Point of Use Systems (POU)
- Point of Entry Systems (POE)
- Municipal

REGULATORY APPROVALS

- Certified by the WQA to NSF/ANSI-61 Standard

TYPICAL PACKAGING

- 1 ft³ Sack
- 25 L Sack
- 5 ft³ Drum (Fiber)
- 1 m³ Supersack
- 42 ft³ Supersack

** Reduces PFAS to non-detect levels ranging from 1 – 5 parts per trillion*

TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS:

Polymer Structure	Polystyrene crosslinked with divinylbenzene
Appearance	Spherical Beads
Functional Group	Complex Amino
Mean Diameter	675 ± 75 µm
Uniformity Coefficient (max.)	1.3
Specific Gravity	1.05
Shipping Weight (approx.)	650 - 700 g/L (40.6 - 43.8 lb/ft ³)
Temperature Limit	100 °C (212.0 °F) (Cl ⁻ form)
Temperature Limit	60 °C (140.0 °F) (OH ⁻ form)



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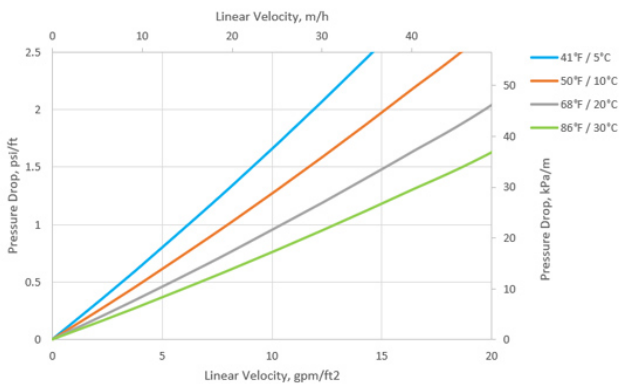
Asia Pacific
T +86 571 876 31382
F +86 571 876 31385
asiapacific@puro-lite.com

Hydraulic Characteristics

PRESSURE DROP

The pressure drop across a bed of ion exchange resin depends on the particle size distribution, bed depth, and voids volume of the exchange material, as well as on the flow rate and viscosity of the influent solution. Factors affecting any of these parameters—such as the presence of particulate matter filtered out by the bed, abnormal compressibility of the resin, or the incomplete classification of the bed—will have an adverse effect, and result in an increased head loss. Depending on the quality of the influent water, the application and the design of the plant, service flow rates may vary from 10 to 40 BV/h.

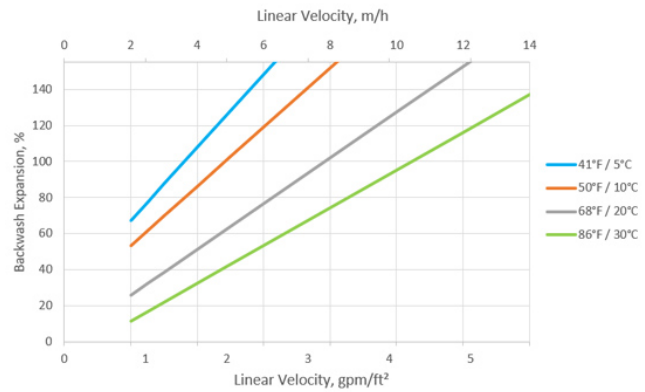
PRESSURE DROP ACROSS RESIN BED



BACKWASH

During up-flow backwash, the resin bed should be expanded in volume between 50 and 70% for at least 10 to 15 minutes. This operation will free particulate matter, clear the bed of bubbles and voids, and reclassify the resin particles ensuring minimum resistance to flow. When first putting into service, approximately 30 minutes of expansion is usually sufficient to properly classify the bed. It is important to note that bed expansion increases with flow rate and decreases with influent fluid temperature. Caution must be taken to avoid loss of resin through the top of the vessel by over expansion of the bed.

BACKWASH EXPANSION OF RESIN BED



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Resinex™ PFCR-2

Selective PFOA/PFOS removal ion exchange resin

Resinex™ PFCR-2 is a food grade, high purity, premium grade, strongly basic gel-type anion exchange resin, specially developed for selective perfluorinated compound removal from potable water in presence of high levels of sulphate. **Resinex™ PFCR-2** offers a superior operating capacity and an excellent selectivity to PFOA and PFOS compounds for economical treatment in co-flow and counter-flow systems. **Resinex™ PFCR-2** is implemented where the removal of monovalent ions are necessary. **Resinex™ PFCR-2** is also suitable for nitrate removal applications. This resin is suggested to be implemented as a one time use application and not suggested to be regenerated.

Typical Properties

Type	Crosslinked polystyrene divinylbenzene
Form	gel, amber, spherical beads
Functional group	Tributylamine
Whole bead count	95% min.
Ionic form, as shipped	Cl ⁻
Bead size	(≥ 95%) 0.30 - 1.25 mm (16x50 mesh)
Uniformity coefficient	1.70 max.
Bulk density, as shipped	650 - 700 kg/m ³
Real density	1.00 - 1.10 g/cm ³
Water retention	37 - 43%
Total capacity (Cl ⁻ form)	0.70 eq/l min.
Stability, temperature	100°C (Cl ⁻ Form) max.
Stability, pH	0 - 14

Key Features and Benefits

- **High Integrity Beads**
Excellent resistance to mechanical degradation ensures low pressure drop
- **High Selectivity To PFOA/PFOS**
To comply with local legislation
- **High Operating Capacity**
Economical advantage
- **Pretreated - Direct Usage In Cartridges**
Point-of-entry and Point-of-use

Typical Applications

- PFOA removal
- PFOS removal

Standard Design Conditions

Bed depth	> 750 mm
Service flow rate	8 - 40 BV/h
Backwash expansion	50 - 75%

Standard Packaging

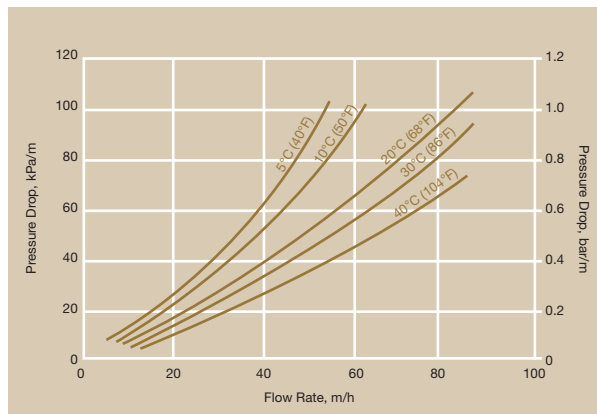
- 25 liter / 1 CFT PE valve bag
- 1000 litre bulk bag
- 2, 5 or 7 CFT drums



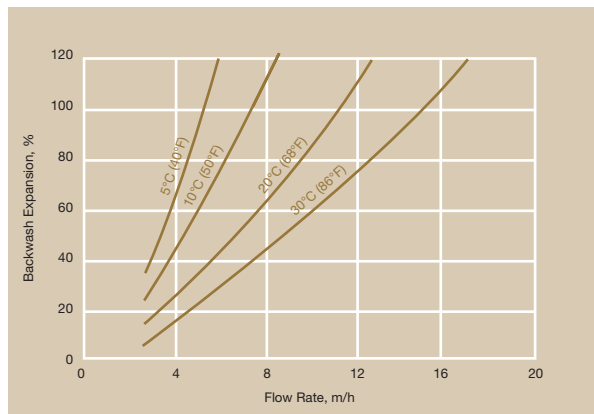
Resinex™ PFCR-2

Selective PFOA/PFOS removal ion exchange resin

Pressure Drop



Backwash Expansion



Standard Regeneration Parameters

Regeneration	Co-Flow
Concentration	5-10% NaCl
Level	150-200 g/l
Flow rate regenerant	4-6 BV/h
Contact time regenerant	30-60 min.
Flow rate rinse	2-6 BV/h
Rinse water required	2 BV

Product Packing



25 lit. polyethylene valve bag
48 bags per pallet



Polypropylene FIBCs
(big bag), 1.000 lit.



CAUTION Strong oxidizing agents such as nitric acid can react violently with ion exchange resins and cause explosive type reactions. Before using strong oxidants, consult sources knowledgeable in the handling of these materials.



For more information or to contact Jacobi visit: www.resinex-ixr.net



NOTICE Due to the progressive nature of the Jacobi Carbons Group and the continually improving design and performance of our products, we reserve the right to change product specifications without prior notification. The information contained in this datasheet is intended to assist a customer in the evaluation and selection of products supplied by Jacobi Carbons. The customer is responsible for determining whether products and the information contained in this document are appropriate for customer's use. Jacobi Carbons assumes no obligation or liability for the usage of the information in this datasheet, no guarantees or warranties, expressed or implied, are provided. Jacobi Carbons disclaims responsibility and the user must accept full responsibility for performance of systems based on this data.

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RX-PFCR2_e_Rev12_20181208

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**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED
CARBON TO TREAT GROUNDWATER IMPACTED WITH
PER- AND POLYFLUOROALKYL SUBSTANCES
MONTEBELLO LAND & WATER COMPANY – WATER SUPPLY WELL #7**

Appendix B

Pilot Test Photo Log



Apr 17, 2020, Treatment skid following delivery to the site by AqueoUS Vets.

WRD Pilot Test Photo Log
MTBLW Well #7

By: RDT

Project: 5302



Photo: 1 of 5



April 24, 2020, System was started up and sampled. Some IX resin remained (floated) at the top of the column even in forward operating mode. No IX media was observed floating during next site visit on April 28.

WRD Pilot Test Photo Log
MTBLW Well #7

By: RDT


Project: 5302

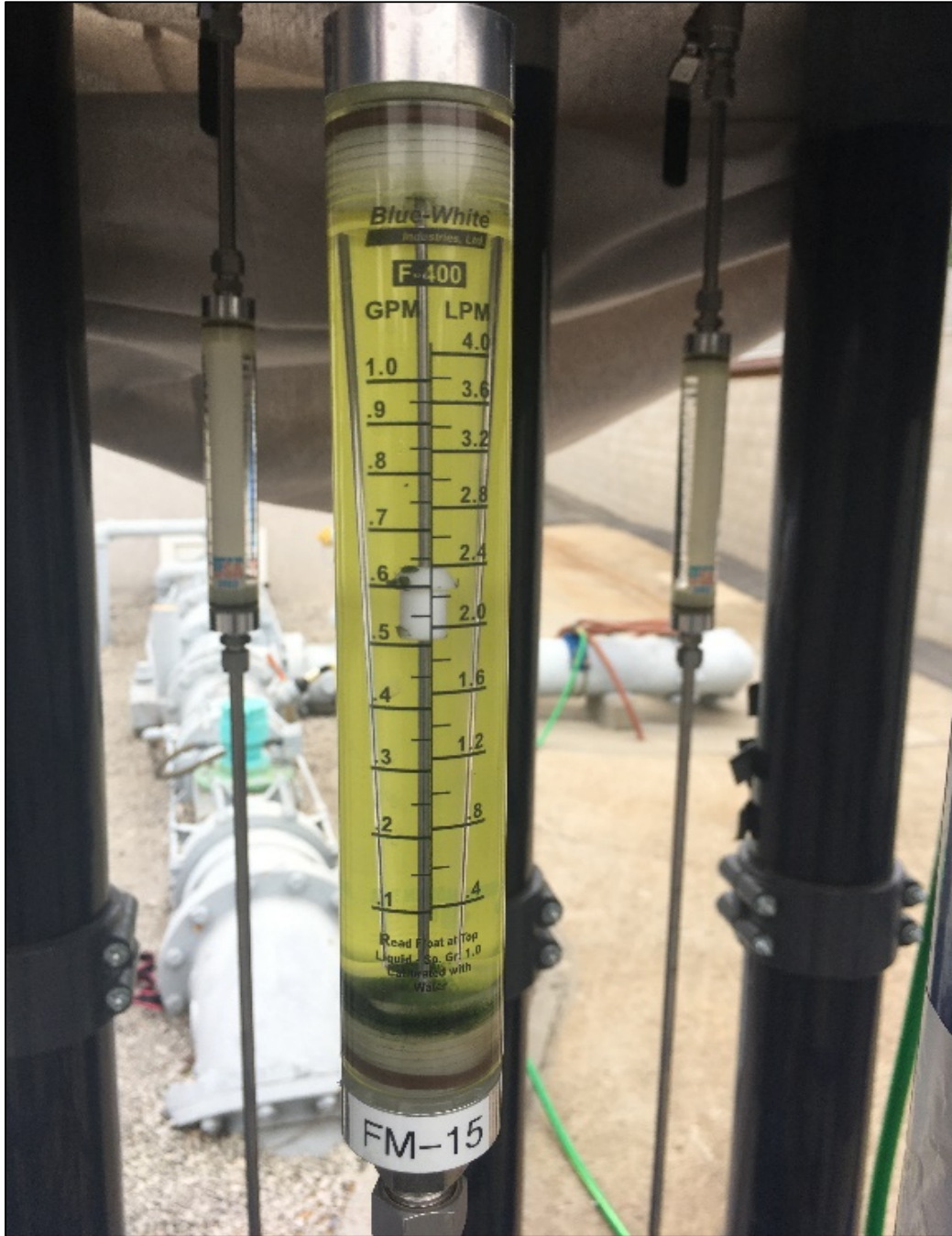


Photo: 2 of 5



June 9, 2020, Possible algae is observed in PFA694E column. Media at MTBLW Well #7 was covered with aluminum foil

WRD Pilot Test Photo Log MTBLW Well #7		
By: RDT		Project: 5302
	Photo: 3	of 5



June 16, 2020, Algae was observed for the first time in a flowmeter at MTBLW Well #7, belonging to PFA694E resin column.

WRD Pilot Test Photo Log
MTBLW Well #7

By: RDT

Project: 5302



Photo: 4 of 5



June 30, 2020, Midpoint sample ports were installed. Note that foil was added to the top of the columns and flowmeters on June 23 so there was no water or media exposed to sunlight.

WRD Pilot Test Photo Log
MTBLW Well #7

By: RDT

Project: 5302



Photo: 5 of 5

**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED
CARBON TO TREAT GROUNDWATER IMPACTED WITH
PER- AND POLYFLUOROALKYL SUBSTANCES
MONTEBELLO LAND & WATER COMPANY SUPPLY WELL #7**

Appendix C

Laboratory Reports

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 866700
Project: 0250000
Group: WRD Pilot

* Effective May 4, 2020 EEAM Lab is A2LA accredited for ISO/IEC 17025:2017.

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 866700
 Project: 0250000
 Sample Group: WRD Pilot

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **April 24, 2020 at 1624**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202004200247	MB-INF-20200424	04/24/2020 1400
	@537.1 @ANIONS48 @VOASDWA	
	Alkalinity in CaCO3 units Arsenic Total ICAP/MS Calcium Total ICAP	
	Chloride Hexavalent chromium(Dissolved) Iron Total ICAP	
	Magnesium Total ICAP Manganese Total ICAP/MS Oil and Grease by 1664(subbed)	
	Perchlorate Potassium Total ICAP Sodium Total ICAP	
	Sulfate Total Dissolved Solid (TDS) Total Hardness as CaCO3 by ICP	
	Total Organic Carbon Total Suspended Solids (TSS) Uranium by ICPMS as pCi/L	
	Uranium ICAP/MS	
202004200249	MB-INF-DUP-20200424	04/24/2020 1401
	Static ID: SET #2	
	@537.1	
202004200254	LH-INF-20200424	04/24/2020 1130
	@537.1 @ANIONS48 @VOASDWA	
	Alkalinity in CaCO3 units Arsenic Total ICAP/MS Calcium Total ICAP	
	Chloride Hexavalent chromium(Dissolved) Iron Total ICAP	
	Magnesium Total ICAP Manganese Total ICAP/MS Oil and Grease by 1664(subbed)	
	Perchlorate Potassium Total ICAP Sodium Total ICAP	
	Sulfate Total Dissolved Solid (TDS) Total Hardness as CaCO3 by ICP	
	Total Organic Carbon Total Suspended Solids (TSS) Uranium by ICPMS as pCi/L	
	Uranium ICAP/MS	
202004200255	LH-INF-DUP-20200424	04/24/2020 1131
	Static ID: SET A	
	@537.1	
202004200260	FB-1-HOLD-20200424	04/24/2020 1150
	Static ID: SET B	
	@537.1 FB	

Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0
- @VOASDWA -- Volatile Organics by GCMS

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 866700
Project: 0250000
Sample Group: WRD Pilot

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The following samples were received from you on **April 24, 2020 at 1624**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
----------	-----------	-------------



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 846700

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6168 (Observation = 14.2 °C) (Corr. Factor = 0.2 °C) (Final = 14.0 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below): _____
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	None/<6	>6mm	Samp ID	None/<6	>6mm	Samp ID	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: <u>Chuck Brooks</u>	PRINT NAME <u>Chuck Brooks</u>	COMPANY/TITLE Eurofins Eaton Analytical	DATE <u>4.24.20</u>	TIME <u>1624</u>
-------------------------------------	-----------------------------------	--	------------------------	---------------------

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 866700
Project: 0250000
Group: WRD Pilot

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944 exp 9-30-2020

Flags Legend:

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

M1 - Matrix spike recovery was high; the associated blank spike recovery was acceptable.

Tel: (626) 386-1100
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Report: 866700
 Project: 0250000
 Group: WRD Pilot

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/24/2020 1624

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202004200247	<u>MB-INF-20200424</u>			
05/04/2020 18:25	Alkalinity in CaCO3 units		170		mg/L	2.0
04/28/2020 01:50	Arsenic Total ICAP/MS		1.3	10	ug/L	1.0
04/28/2020 13:05	Calcium Total ICAP		65		mg/L	1.0
04/24/2020 22:41	Chloride		54	250	mg/L	2.5
05/03/2020 16:35	Hexavalent chromium(Dissolved)		0.34		ug/L	0.020
04/28/2020 13:05	Iron Total ICAP		0.057	0.3	mg/L	0.020
04/28/2020 13:05	Magnesium Total ICAP		13		mg/L	0.10
04/28/2020 01:50	Manganese Total ICAP/MS		2.8	50	ug/L	2.0
04/24/2020 22:41	Nitrate as Nitrogen by IC		2.2	10	mg/L	0.50
04/24/2020 22:41	Nitrate as NO3 (calc)		9.9	45	mg/L	2.2
04/28/2020 21:45	Perfluorobutanesulfonic acid (PFBS)		0.0080		ug/L	0.0020
04/28/2020 21:45	Perfluoroheptanoic acid (PFHpA)		0.0026		ug/L	0.0020
04/28/2020 21:45	Perfluorohexanesulfonic acid (PFHxS)		0.0068		ug/L	0.0020
04/28/2020 21:45	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
04/28/2020 21:45	Perfluorononanoic acid (PFNA)		0.0033		ug/L	0.0020
04/28/2020 21:45	Perfluorooctanesulfonic acid (PFOS)		0.039		ug/L	0.0020
04/28/2020 21:45	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
04/28/2020 13:05	Potassium Total ICAP		3.9		mg/L	1.0
04/28/2020 13:05	Sodium Total ICAP		52		mg/L	1.0
04/24/2020 22:41	Sulfate		82	250	mg/L	2.5
04/30/2020 23:18	Total Dissolved Solids (TDS)		390	500	mg/L	10
04/28/2020 16:26	Total Hardness as CaCO3 by ICP (calc)		220		mg/L	3.0
04/24/2020 22:41	Total Nitrate, Nitrite-N, CALC		2.2		mg/L	0.10
04/28/2020 21:30	Total Organic Carbon		0.60		mg/L	0.30
04/28/2020 15:20	Uranium by ICPMS as pCi/L		1.5		pCi/L	0.70
04/28/2020 01:50	Uranium ICAP/MS		2.2	30	ug/L	1.0
		202004200249	<u>MB-INF-DUP-20200424</u>			
04/28/2020 21:55	Perfluorobutanesulfonic acid (PFBS)		0.0077		ug/L	0.0020
04/28/2020 21:55	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
04/28/2020 21:55	Perfluoroheptanoic acid (PFHpA)		0.0026		ug/L	0.0020
04/28/2020 21:55	Perfluorohexanesulfonic acid (PFHxS)		0.0072		ug/L	0.0020
04/28/2020 21:55	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
04/28/2020 21:55	Perfluorononanoic acid (PFNA)		0.0037		ug/L	0.0020
04/28/2020 21:55	Perfluorooctanesulfonic acid (PFOS)		0.040		ug/L	0.0020
04/28/2020 21:55	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 866700
 Project: 0250000
 Group: WRD Pilot

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/24/2020 1624

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202004200254	<u>LH-INF-20200424</u>			
04/26/2020 23:22	2-Butanone (MEK)		5.8		ug/L	5.0
05/04/2020 18:07	Alkalinity in CaCO3 units		200		mg/L	2.0
04/28/2020 01:53	Arsenic Total ICAP/MS		2.6	10	ug/L	1.0
04/28/2020 13:03	Calcium Total ICAP		110		mg/L	1.0
04/24/2020 21:49	Chloride		100	250	mg/L	5.0
05/03/2020 16:05	Hexavalent chromium(Dissolved)		0.69		ug/L	0.020
04/28/2020 13:03	Magnesium Total ICAP		21		mg/L	0.10
04/24/2020 21:49	Nitrate as Nitrogen by IC		2.6	10	mg/L	1.0
04/24/2020 21:49	Nitrate as NO3 (calc)		12	45	mg/L	4.4
04/29/2020 09:24	Oil and Grease by 1664(subbed)		1.15		mg/L	0.96
04/28/2020 22:04	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
04/28/2020 22:04	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
04/28/2020 22:04	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
04/28/2020 22:04	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
04/28/2020 22:04	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
04/28/2020 22:04	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
04/28/2020 13:03	Potassium Total ICAP		4.5		mg/L	1.0
04/28/2020 13:03	Sodium Total ICAP		68		mg/L	1.0
04/24/2020 21:49	Sulfate		180	250	mg/L	5.0
04/30/2020 23:19	Total Dissolved Solids (TDS)		630	500	mg/L	10
04/28/2020 16:26	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
04/24/2020 21:49	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
04/29/2020 07:17	Total Organic Carbon		0.57		mg/L	0.30
04/28/2020 15:20	Uranium by ICPMS as pCi/L		3.7		pCi/L	0.70
04/28/2020 01:53	Uranium ICAP/MS		5.5	30	ug/L	1.0
		202004200255	<u>LH-INF-DUP-20200424</u>			
04/28/2020 22:14	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
04/28/2020 22:14	Perfluorohexanesulfonic acid (PFHxS)		0.0069		ug/L	0.0020
04/28/2020 22:14	Perfluorohexanoic acid (PFHxA)		0.0027		ug/L	0.0020
04/28/2020 22:14	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
04/28/2020 22:14	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
04/28/2020 22:14	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020

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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
MB-INF-20200424 (202004200247)						Sampled on 04/24/2020 1400			
EPA 200.8 - ICPMS Metals									
04/26/20	04/28/20 01:50	1244559	1244761	(EPA 200.8)	Arsenic Total ICAP/MS	1.3	ug/L	1.0	1
04/26/20	04/28/20 01:50	1244559	1244761	(EPA 200.8)	Manganese Total ICAP/MS	2.8	ug/L	2.0	1
04/26/20	04/28/20 01:50	1244559	1244761	(EPA 200.8)	Uranium ICAP/MS	2.2	ug/L	1.0	1
EPA 200.7 - ICP Metals									
04/26/20	04/28/20 13:05	1244559	1244841	(EPA 200.7)	Calcium Total ICAP	65	mg/L	1.0	1
04/26/20	04/28/20 13:05	1244559	1244841	(EPA 200.7)	Iron Total ICAP	0.057	mg/L	0.020	1
04/26/20	04/28/20 13:05	1244559	1244841	(EPA 200.7)	Magnesium Total ICAP	13	mg/L	0.10	1
04/26/20	04/28/20 13:05	1244559	1244841	(EPA 200.7)	Potassium Total ICAP	3.9	mg/L	1.0	1
04/26/20	04/28/20 13:05	1244559	1244841	(EPA 200.7)	Sodium Total ICAP	52	mg/L	1.0	1
SM 5310C - Total Organic Carbon									
	04/28/20 21:30		1244980	(SM 5310C)	Total Organic Carbon	0.60	mg/L	0.30	1
EPA 200.8 - Uranium by ICPMS as pCi/L									
	04/28/20 15:20			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.5 (c)	pCi/L	0.70	1
SM 2340B - Total Hardness as CaCO3 by ICP									
	04/28/20 16:26			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	220 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
	05/03/20 16:35		1246143	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.34	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	04/24/20 22:41		1244275	(EPA 300.0)	Nitrate as Nitrogen by IC	2.2	mg/L	0.50	5
	04/24/20 22:41		1244275	(EPA 300.0)	Nitrate as NO3 (calc)	9.9	mg/L	2.2	5
	04/24/20 22:41		1244275	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	04/24/20 22:41		1244275	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.2	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	04/24/20 22:41		1244657	(EPA 300.0)	Chloride	54	mg/L	2.5	5
	04/24/20 22:41		1244657	(EPA 300.0)	Sulfate	82	mg/L	2.5	5
EPA 314.0 - Perchlorate									
	04/28/20 17:18	(1)	1244835	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

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04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0080	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0026	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0068	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0033	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.039	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	13C2-PFDA	111	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	13C2-PFHxA	106	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	13C3-HFPO-DA	95	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	d3-NMeFOSAA	96	%		1
04/27/20	04/28/20 21:45	1244691	1245239	(EPA 537.1)	d5-NEtFOSAA	107	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	04/29/20 09:24			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.95	1
EPA 524.2 - Volatile Organics by GCMS									
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LM)	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1

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04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1

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04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	1,2-Dichloroethane-d4	105	%		1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	4-Bromofluorobenzene	95	%		1
04/26/20	04/26/20 22:58	1244639	1244668	(EPA 524.2)	Toluene-d8	96	%		1
SM 2320B - Alkalinity in CaCO3 units									
	05/04/20 18:25		1246155	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
04/30/20	04/30/20 23:18	1245720	1245726	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	390	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	04/30/20 21:06		1245711	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
MB-INF-DUP-20200424 (202004200249)									
Static ID: SET #2									
EPA 537.1 - EPA Method 537.1									
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

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Report: 866700
 Project: 0250000
 Group: WRD Pilot

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/24/2020 1624

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0077	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0026	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0072	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0037	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.040	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	13C2-PFDA	111	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	13C2-PFHxA	105	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	13C3-HFPO-DA	93	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	d3-NMeFOSAA	95	%		1
04/27/20	04/28/20 21:55	1244691	1245239	(EPA 537.1)	d5-NEtFOSAA	110	%		1

LH-INF-20200424 (202004200254)

Sampled on 04/24/2020 1130

EPA 200.8 - ICPMS Metals

04/26/20	04/28/20 01:53	1244559	1244761	(EPA 200.8)	Arsenic Total ICAP/MS	2.6	ug/L	1.0	1
04/26/20	04/28/20 01:53	1244559	1244761	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
04/26/20	04/28/20 01:53	1244559	1244761	(EPA 200.8)	Uranium ICAP/MS	5.5	ug/L	1.0	1

EPA 200.7 - ICP Metals

04/26/20	04/28/20 13:03	1244559	1244841	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
04/26/20	04/28/20 13:03	1244559	1244841	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
04/26/20	04/28/20 13:03	1244559	1244841	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
04/26/20	04/28/20 13:03	1244559	1244841	(EPA 200.7)	Potassium Total ICAP	4.5	mg/L	1.0	1
04/26/20	04/28/20 13:03	1244559	1244841	(EPA 200.7)	Sodium Total ICAP	68	mg/L	1.0	1

SM 5310C - Total Organic Carbon

	04/29/20 07:17		1244982	(SM 5310C)	Total Organic Carbon	0.57 (M1)	mg/L	0.30	1
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EPA 200.8 - Uranium by ICPMS as pCi/L

	04/28/20 15:20			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.7 (c)	pCi/L	0.70	1
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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
SM 2340B - Total Hardness as CaCO3 by ICP									
	04/28/20 16:26			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
	05/03/20 16:05		1246143	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.69	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	04/24/20 21:49		1244275	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	1.0	10
	04/24/20 21:49		1244275	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	4.4	10
	04/24/20 21:49		1244275	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.12	10
	04/24/20 21:49		1244275	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	04/24/20 21:49		1244657	(EPA 300.0)	Chloride	100	mg/L	5.0	10
	04/24/20 21:49		1244657	(EPA 300.0)	Sulfate	180	mg/L	5.0	10
EPA 314.0 - Perchlorate									
	04/28/20 16:54		(1) 1244835	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	13C2-PFDA	111	%		1

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Samples Received on:
 04/24/2020 1624

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	13C2-PFHxA	109	%		1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	13C3-HFPO-DA	97	%		1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	d3-NMeFOSAA	93	%		1
04/27/20	04/28/20 22:04	1244691	1245239	(EPA 537.1)	d5-NetFOSAA	109	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	04/29/20 09:24			(EPA 1664)	Oil and Grease by 1664(subbed)	1.15	mg/L	0.96	1
EPA 524.2 - Volatile Organics by GCMS									
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LM)	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	2-Butanone (MEK)	5.8	ug/L	5.0	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1

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04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 866700
 Project: 0250000
 Group: WRD Pilot

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/24/2020 1624

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	1,2-Dichloroethane-d4	108	%		1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	4-Bromofluorobenzene	96	%		1
04/26/20	04/26/20 23:22	1244639	1244668	(EPA 524.2)	Toluene-d8	93	%		1
SM 2320B - Alkalinity in CaCO3 units									
	05/04/20 18:07		1246155	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
04/30/20	04/30/20 23:19	1245720	1245726	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	630	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	04/30/20 21:07		1245711	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
LH-INF-DUP-20200424 (202004200255)						Sampled on 04/24/2020 1131			
Static ID: SET A									
EPA 537.1 - EPA Method 537.1									
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0069	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0027	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	13C2-PFDA	109	%		1

Rounding on totals after summation.
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Report: 866700
 Project: 0250000
 Group: WRD Pilot

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/24/2020 1624

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	13C2-PFHxA	106	%		1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	13C3-HFPO-DA	94	%		1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	d3-NMeFOSAA	95	%		1
04/27/20	04/28/20 22:14	1244691	1245239	(EPA 537.1)	d5-NEtFOSAA	107	%		1

FB-1-HOLD-20200424 (202004200260)

Sampled on 04/24/2020 1150

Static ID: SET B

EPA 537.1 - EPA Method 537.1

04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	13C2-PFDA	105	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	13C2-PFHxA	115	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	13C3-HFPO-DA	106	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	d3-NMeFOSAA	104	%		1
04/30/20	05/04/20 17:08	1245600	1246146	(EPA 537.1)	d5-NEtFOSAA	106	%		1

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Report: 866700
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Group: WRD Pilot

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1244275

202004200247 MB-INF-20200424
 202004200254 LH-INF-20200424

Analysis Date: 04/24/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1244657

202004200247 MB-INF-20200424
 202004200254 LH-INF-20200424

Analysis Date: 04/24/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Volatile Organics by GCMS

Prep Batch: 1244639 Analytical Batch: 1244668

202004200247 MB-INF-20200424
 202004200254 LH-INF-20200424

Analysis Date: 04/26/2020

Analyzed by: TG9W
 Analyzed by: TG9W

ICPMS Metals

Prep Batch: 1244559 Analytical Batch: 1244761

202004200247 MB-INF-20200424
 202004200254 LH-INF-20200424

Analysis Date: 04/28/2020

Analyzed by: AZS
 Analyzed by: AZS

Perchlorate

Analytical Batch: 1244835

202004200247 MB-INF-20200424
 202004200254 LH-INF-20200424

Analysis Date: 04/28/2020

Analyzed by: H5VG
 Analyzed by: H5VG

ICP Metals

Prep Batch: 1244559 Analytical Batch: 1244841

202004200247 MB-INF-20200424
 202004200254 LH-INF-20200424

Analysis Date: 04/28/2020

Analyzed by: NINA
 Analyzed by: NINA

Total Organic Carbon

Analytical Batch: 1244980

202004200247 MB-INF-20200424

Analysis Date: 04/28/2020

Analyzed by: ZS6I

Total Organic Carbon

Analytical Batch: 1244982

202004200254 LH-INF-20200424

Analysis Date: 04/29/2020

Analyzed by: ZS6I

EPA Method 537.1

Prep Batch: 1244691 Analytical Batch: 1245239

202004200247 MB-INF-20200424
 202004200249 MB-INF-DUP-20200424
 202004200254 LH-INF-20200424
 202004200255 LH-INF-DUP-20200424

Analysis Date: 04/28/2020

Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ

Total Suspended Solids (TSS)

Analytical Batch: 1245711

202004200247 MB-INF-20200424
 202004200254 LH-INF-20200424

Analysis Date: 04/30/2020

Analyzed by: TJ52
 Analyzed by: TJ52

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Report: 866700
Project: 0250000
Group: WRD Pilot

Water Replenishment District

Total Dissolved Solids (TDS)**Prep Batch: 1245720 Analytical Batch: 1245726**

202004200247 MB-INF-20200424
202004200254 LH-INF-20200424

Analysis Date: 04/30/2020

Analyzed by: TJ52
Analyzed by: TJ52

Hexavalent chromium(Dissolved)**Analytical Batch: 1246143**

202004200247 MB-INF-20200424
202004200254 LH-INF-20200424

Analysis Date: 05/03/2020

Analyzed by: TLH
Analyzed by: TLH

EPA Method 537.1**Prep Batch: 1245600 Analytical Batch: 1246146**

202004200260 FB-1-HOLD-20200424

Analysis Date: 05/04/2020

Analyzed by: KAM

Alkalinity in CaCO3 units**Analytical Batch: 1246155**

202004200247 MB-INF-20200424
202004200254 LH-INF-20200424

Analysis Date: 05/04/2020

Analyzed by: ZB2Z
Analyzed by: ZB2Z

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Report: 866700
 Project: 0250000
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1244275					Analysis Date: 04/24/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.50	mg/L	100	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.52	mg/L	101	(90-110)	20	0.80
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0521	mg/L	104	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0122	mg/L	98	(50-150)		
MS_202004200254	Nitrate as Nitrogen by IC	2.6	13	16.1	mg/L	108	(80-120)		
MS_202004230209	Nitrate as Nitrogen by IC	0.42	6.5	6.88	mg/L	103	(80-120)		
MSD_202004200254	Nitrate as Nitrogen by IC	2.6	13	16.0	mg/L	107	(80-120)	20	0.66
MSD_202004230209	Nitrate as Nitrogen by IC	0.42	6.5	7.26	mg/L	109	(80-120)	20	5.3
LCS1	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0484	mg/L	97	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.00680	mg/L	54	(50-150)		
MS_202004200254	Nitrite Nitrogen by IC	ND	5	5.29	mg/L	106	(80-120)		
MS_202004230209	Nitrite Nitrogen by IC	ND	2.5	2.52	mg/L	101	(80-120)		
MSD_202004200254	Nitrite Nitrogen by IC	ND	5	5.26	mg/L	105	(80-120)	20	0.60
MSD_202004230209	Nitrite Nitrogen by IC	ND	2.5	2.58	mg/L	103	(80-120)	20	2.4
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1244657					Analysis Date: 04/24/2020				
LCS1	Chloride		25	25.9	mg/L	104	(90-110)		
LCS2	Chloride		25	26.0	mg/L	104	(90-110)	20	0.39
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.455	mg/L	91	(50-150)		
MS_202004200254	Chloride	100	130	247	mg/L	115	(80-120)		
MS_202004230209	Chloride	88	65	155	mg/L	107	(80-120)		
MSD_202004200254	Chloride	100	130	246	mg/L	114	(80-120)	20	0.39
MSD_202004230209	Chloride	88	65	159	mg/L	114	(80-120)	20	2.4
LCS1	Sulfate		50	51.2	mg/L	102	(90-110)		
LCS2	Sulfate		50	51.2	mg/L	102	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.989	mg/L	99	(50-150)		
MRL_W	Sulfate		0.25	0.249	mg/L	100	(50-150)		
MS_202004200254	Sulfate	180	250	458	mg/L	111	(80-120)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 866700
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202004230209	Sulfate	220	125	351	mg/L	103	(80-120)		
MSD_202004200254	Sulfate	180	250	456	mg/L	110	(80-120)	20	0.55
MSD_202004230209	Sulfate	220	125	359	mg/L	110	(80-120)	20	2.3

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1244668

Analysis Date: 04/26/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,1,1,2-Tetrachloroethane		5	5.41	ug/L	108	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.14	ug/L	103	(70-130)	20	5.1
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.86	ug/L	97	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.94	ug/L	99	(70-130)	20	1.6
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.22	ug/L	104	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.16	ug/L	103	(70-130)	20	1.2
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1,2-Trichloroethane		5	5.09	ug/L	102	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.05	ug/L	101	(70-130)	20	0.79
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1-Dichloroethane		5	4.80	ug/L	96	(70-130)		
LCS2	1,1-Dichloroethane		5	4.90	ug/L	98	(70-130)	20	2.1
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.85	ug/L	97	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.85	ug/L	97	(70-130)	20	0.0
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1-Dichloropropene		5	4.85	ug/L	97	(70-130)		
LCS2	1,1-Dichloropropene		5	5.01	ug/L	100	(70-130)	20	3.3
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	5.62	ug/L	112	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	5.27	ug/L	105	(70-130)	20	6.4
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.760	ug/L	152	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 866700
 Project: 0250000
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,2,3-Trichloropropane		5	5.29	ug/L	106	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.22	ug/L	104	(70-130)	20	1.3
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	5.33	ug/L	107	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.11	ug/L	102	(70-130)	20	4.2
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.690	ug/L	138	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	5.18	ug/L	104	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.08	ug/L	102	(70-130)	20	2.0
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,2-Dichloroethane		5	4.95	ug/L	99	(70-130)		
LCS2	1,2-Dichloroethane		5	4.92	ug/L	98	(70-130)	20	0.61
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	99.6	%	100	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			108	%	108	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	108	%	108	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	110	%	110	(70-130)		
LCS1	1,2-Dichloropropane		5	5.02	ug/L	100	(70-130)		
LCS2	1,2-Dichloropropane		5	5.02	ug/L	100	(70-130)	20	0.0
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	5.16	ug/L	103	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	5.10	ug/L	102	(70-130)	20	1.2
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	1,3-Dichloropropane		5	5.15	ug/L	103	(70-130)		
LCS2	1,3-Dichloropropane		5	5.01	ug/L	100	(70-130)	20	2.8
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.450	ug/L	90	(50-150)		
LCS1	2,2-Dichloropropane		5	5.27	ug/L	105	(70-130)		
LCS2	2,2-Dichloropropane		5	5.24	ug/L	105	(70-130)	20	0.57
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.500	ug/L	100	(50-150)		
LCS1	2-Butanone (MEK)		50	48.7	ug/L	97	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	2-Butanone (MEK)		50	47.9	ug/L	96	(70-130)	20	1.7
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.16	ug/L	103	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	102	%	102	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	98.4	%	98	(70-130)		
MBLK	4-Bromofluorobenzene (S)			91.8	%	92	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	95.4	%	95	(70-130)		
MRL_W	4-Bromofluorobenzene (S)		5	91.2	%	91	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	53.4	ug/L	107	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	51.5	ug/L	103	(70-130)	20	3.6
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.72	ug/L	94	(50-150)		
LCS1	Benzene		5	4.92	ug/L	98	(70-130)		
LCS2	Benzene		5	4.87	ug/L	97	(70-130)	20	1.0
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Bromobenzene		5	4.89	ug/L	98	(70-130)		
LCS2	Bromobenzene		5	4.84	ug/L	97	(70-130)	20	1.0
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	Bromochloromethane		5	4.75	ug/L	95	(70-130)		
LCS2	Bromochloromethane		5	4.82	ug/L	96	(70-130)	20	1.5
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromodichloromethane		5	4.80	ug/L	96	(70-130)		
LCS2	Bromodichloromethane		5	4.70	ug/L	94	(70-130)	20	2.1
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.420	ug/L	84	(50-150)		
LCS1	Bromoethane		5	4.90	ug/L	98	(70-130)		
LCS2	Bromoethane		5	5.09	ug/L	102	(70-130)	20	3.8
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	Bromoform		5	5.07	ug/L	101	(70-130)		
LCS2	Bromoform		5	5.05	ug/L	101	(70-130)	20	0.40
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.630	ug/L	126	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.00	ug/L	100	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.10	ug/L	102	(70-130)	20	2.0

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 866700
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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.590	ug/L	118	(50-150)		
LCS1	Carbon disulfide		5	4.95	ug/L	99	(70-130)		
LCS2	Carbon disulfide		5	4.98	ug/L	100	(70-130)	20	0.60
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.470	ug/L	94	(50-150)		
LCS1	Carbon Tetrachloride		5	4.81	ug/L	96	(70-130)		
LCS2	Carbon Tetrachloride		5	4.93	ug/L	99	(70-130)	20	2.5
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.420	ug/L	84	(50-150)		
LCS1	Chlorobenzene		5	4.96	ug/L	99	(70-130)		
LCS2	Chlorobenzene		5	4.84	ug/L	97	(70-130)	20	2.5
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	Chlorodibromomethane		5	5.10	ug/L	102	(70-130)		
LCS2	Chlorodibromomethane		5	5.04	ug/L	101	(70-130)	20	1.2
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Chloroethane		5	4.72	ug/L	94	(70-130)		
LCS2	Chloroethane		5	4.54	ug/L	91	(70-130)	20	3.9
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.82	ug/L	96	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.77	ug/L	95	(70-130)	20	1.0
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.460	ug/L	92	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.55	ug/L	91	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.72	ug/L	94	(70-130)	20	3.7
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.530	ug/L	106	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.75	ug/L	95	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.69	ug/L	94	(70-130)	20	1.3
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.500	ug/L	100	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	5.22	ug/L	104	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	5.05	ug/L	101	(70-130)	20	3.3
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Dibromomethane		5	4.87	ug/L	97	(70-130)		
LCS2	Dibromomethane		5	4.73	ug/L	95	(70-130)	20	2.9
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.90	ug/L	98	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.97	ug/L	99	(70-130)	20	1.4
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Dichloromethane		5	4.78	ug/L	96	(70-130)		
LCS2	Dichloromethane		5	4.78	ug/L	96	(70-130)	20	0.0
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Di-isopropyl ether		5	4.85	ug/L	97	(70-130)		
LCS2	Di-isopropyl ether		5	4.85	ug/L	97	(70-130)	20	0.0
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.540	ug/L	108	(50-150)		
LCS1	Ethyl benzene		5	5.00	ug/L	100	(70-130)		
LCS2	Ethyl benzene		5	5.02	ug/L	100	(70-130)	20	0.40
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	Hexachlorobutadiene		5	5.23	ug/L	105	(70-130)		
LCS2	Hexachlorobutadiene		5	5.09	ug/L	102	(70-130)	20	2.7
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.680	ug/L	136	(50-150)		
LCS1	Isopropylbenzene		5	5.07	ug/L	101	(70-130)		
LCS2	Isopropylbenzene		5	4.91	ug/L	98	(70-130)	20	3.2
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.400	ug/L	80	(50-150)		
LCS1	m,p-Xylenes		10	10.0	ug/L	100	(70-130)		
LCS2	m,p-Xylenes		10	10.1	ug/L	101	(70-130)	20	1
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.780	ug/L	78	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.360	ug/L	72	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	5.07	ug/L	101	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.87	ug/L	97	(70-130)	20	4.0
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.450	ug/L	90	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.98	ug/L	100	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.94	ug/L	99	(70-130)	20	0.81
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.570	ug/L	114	(50-150)		
LCS1	Naphthalene		5	6.48	ug/L	130	(70-130)		
LCS2	Naphthalene		5	6.25	ug/L	125	(70-130)	20	3.6
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.730	ug/L	146	(50-150)		
LCS1	n-Butylbenzene		5	5.37	ug/L	107	(70-130)		
LCS2	n-Butylbenzene		5	5.22	ug/L	104	(70-130)	20	2.8
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	n-Propylbenzene		5	5.22	ug/L	104	(70-130)		
LCS2	n-Propylbenzene		5	5.13	ug/L	103	(70-130)	20	1.7
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	o-Chlorotoluene		5	4.98	ug/L	100	(70-130)		
LCS2	o-Chlorotoluene		5	4.95	ug/L	99	(70-130)	20	0.60
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.430	ug/L	86	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	5.38	ug/L	108	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.20	ug/L	104	(70-130)	20	3.4
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.480	ug/L	96	(50-150)		
LCS1	o-Xylene		5	5.15	ug/L	103	(70-130)		
LCS2	o-Xylene		5	5.11	ug/L	102	(70-130)	20	0.78
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.440	ug/L	88	(50-150)		
LCS1	p-Chlorotoluene		5	5.26	ug/L	105	(70-130)		
LCS2	p-Chlorotoluene		5	5.14	ug/L	103	(70-130)	20	2.3
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.450	ug/L	90	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.11	ug/L	102	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.08	ug/L	102	(70-130)	20	0.59
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.410	ug/L	82	(50-150)		
LCS1	p-Isopropyltoluene		5	5.25	ug/L	105	(70-130)		
LCS2	p-Isopropyltoluene		5	5.13	ug/L	103	(70-130)	20	2.3
MBLK	p-Isopropyltoluene			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 866700
 Project: 0250000
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	p-Isopropyltoluene		0.5	0.430	ug/L	86	(50-150)		
LCS1	sec-Butylbenzene		5	5.27	ug/L	105	(70-130)		
LCS2	sec-Butylbenzene		5	5.15	ug/L	103	(70-130)	20	2.3
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	Styrene		5	5.17	ug/L	103	(70-130)		
LCS2	Styrene		5	5.10	ug/L	102	(70-130)	20	1.4
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.410	ug/L	82	(50-150)		
LCS1	tert-amyl Methyl Ether		5	5.37	ug/L	107	(70-130)		
LCS2	tert-amyl Methyl Ether		5	5.21	ug/L	104	(70-130)	20	3.0
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.540	ug/L	108	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.43	ug/L	109	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	5.17	ug/L	103	(70-130)	20	4.9
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.520	ug/L	104	(50-150)		
LCS1	tert-Butylbenzene		5	5.11	ug/L	102	(70-130)		
LCS2	tert-Butylbenzene		5	5.01	ug/L	100	(70-130)	20	2.0
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	5.02	ug/L	100	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.86	ug/L	97	(70-130)	20	3.2
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.440	ug/L	88	(50-150)		
LCS1	Toluene		5	4.88	ug/L	98	(70-130)		
LCS2	Toluene		5	4.74	ug/L	95	(70-130)	20	2.9
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Toluene-d8 (S)		5	100	%	100	(70-130)		
LCS2	Toluene-d8 (S)		5	96.2	%	96	(70-130)		
MBLK	Toluene-d8 (S)			93.4	%	93	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	95.6	%	96	(70-130)		
MRLW	Toluene-d8 (S)		5	91.0	%	91	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.87	ug/L	97	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.77	ug/L	95	(70-130)	20	2.1
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.490	ug/L	98	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 866700
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	trans-1,3-Dichloropropene		5	5.49	ug/L	110	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	5.18	ug/L	104	(70-130)	20	5.8
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.650	ug/L	130	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.88	ug/L	98	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.91	ug/L	98	(70-130)	20	0.61
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.440	ug/L	88	(50-150)		
LCS1	Trichlorofluoromethane		5	5.04	ug/L	101	(70-130)		
LCS2	Trichlorofluoromethane		5	5.00	ug/L	100	(70-130)	20	0.80
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.87	ug/L	97	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.82	ug/L	96	(70-130)	20	1.0
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.460	ug/L	92	(50-150)		
LCS1	Vinyl chloride (VC)		5	5.03	ug/L	101	(70-130)		
LCS2	Vinyl chloride (VC)		5	5.16	ug/L	103	(70-130)	20	2.5
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.490	ug/L	98	(50-150)		
MRLLW	Vinyl chloride (VC)		0.25	0.250	ug/L	100	(50-150)		

ICPMS Metals by EPA 200.8

Analytical Batch: 1244761

Analysis Date: 04/28/2020

LCS1	Arsenic Total ICAP/MS		50	46.4	ug/L	93	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	46.8	ug/L	94	(85-115)	20	0.64
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.04	ug/L	104	(50-150)		
MS_202004210157	Arsenic Total ICAP/MS	ND	50	49.1	ug/L	98	(70-130)		
MS2_202004230341	Arsenic Total ICAP/MS	7.9	50	53.5	ug/L	91	(70-130)		
MSD_202004210157	Arsenic Total ICAP/MS	ND	50	49.1	ug/L	98	(70-130)	20	0.043
MSD2_202004230341	Arsenic Total ICAP/MS	7.9	50	54.1	ug/L	93	(70-130)	20	1.1
LCS1	Manganese Total ICAP/MS		100	93.5	ug/L	94	(85-115)		
LCS2	Manganese Total ICAP/MS		100	95.4	ug/L	95	(85-115)	20	2.0
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.02	ug/L	101	(50-150)		
MS_202004210157	Manganese Total ICAP/MS	ND	100	94.4	ug/L	94	(70-130)		
MS2_202004230341	Manganese Total ICAP/MS	230	100	319	ug/L	86	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 866700
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202004210157	Manganese Total ICAP/MS	ND	100	95.9	ug/L	96	(70-130)	20	1.5
MSD2_202004230341	Manganese Total ICAP/MS	230	100	317	ug/L	85	(70-130)	20	0.53
LCS1	Uranium ICAP/MS		50	46.4	ug/L	93	(85-115)		
LCS2	Uranium ICAP/MS		50	47.3	ug/L	95	(85-115)	20	1.9
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.930	ug/L	93	(50-150)		
MS_202004210157	Uranium ICAP/MS	2.5	50	51.7	ug/L	98	(70-130)		
MS2_202004230341	Uranium ICAP/MS	7.2	50	55.9	ug/L	97	(70-130)		
MSD_202004210157	Uranium ICAP/MS	2.5	50	52.7	ug/L	100	(70-130)	20	1.9
MSD2_202004230341	Uranium ICAP/MS	7.2	50	56.6	ug/L	99	(70-130)	20	1.2

Perchlorate by EPA 314.0

Analytical Batch: 1244835

Analysis Date: 04/28/2020

LCS1	Perchlorate		25	24.2	ug/L	97	(85-115)		
LCS2	Perchlorate		25	24.5	ug/L	98	(85-115)	15	1.2
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.89	ug/L	97	(75-125)		
MS_202003040003	Perchlorate	ND	25	23.2	ug/L	93	(80-120)		
MSD_202003040003	Perchlorate	ND	25	23.4	ug/L	94	(80-120)	15	1.1

ICP Metals by EPA 200.7

Analytical Batch: 1244841

Analysis Date: 04/28/2020

LCS1	Calcium Total ICAP		50	49.3	mg/L	99	(85-115)		
LCS2	Calcium Total ICAP		50	49.0	mg/L	98	(85-115)	20	0.41
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.968	mg/L	97	(50-150)		
MS_202004230379	Calcium Total ICAP	23	50	72.4	mg/L	99	(70-130)		
MS2_202004240095	Calcium Total ICAP	5.6	50	55.5	mg/L	100	(70-130)		
MSD_202004230379	Calcium Total ICAP	23	50	71.5	mg/L	97	(70-130)	20	1.3
MSD2_202004240095	Calcium Total ICAP	5.6	50	56.2	mg/L	101	(70-130)	20	1.2
LCS1	Iron Total ICAP		5	4.95	mg/L	99	(85-115)		
LCS2	Iron Total ICAP		5	4.92	mg/L	98	(85-115)	20	0.61
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0202	mg/L	101	(50-150)		
MS_202004230379	Iron Total ICAP	ND	5	5.04	mg/L	101	(70-130)		
MS2_202004240095	Iron Total ICAP	ND	5	4.96	mg/L	99	(70-130)		
MSD_202004230379	Iron Total ICAP	ND	5	5.00	mg/L	100	(70-130)	20	0.86
MSD2_202004240095	Iron Total ICAP	ND	5	5.03	mg/L	101	(70-130)	20	1.4
LCS1	Magnesium Total ICAP		20	19.5	mg/L	98	(85-115)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 866700
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Magnesium Total ICAP		20	19.4	mg/L	97	(85-115)	20	0.51
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0924	mg/L	92	(50-150)		
MS_202004230379	Magnesium Total ICAP	3.3	20	23.4	mg/L	101	(70-130)		
MS2_202004240095	Magnesium Total ICAP	1.8	20	21.7	mg/L	100	(70-130)		
MSD_202004230379	Magnesium Total ICAP	3.3	20	23.2	mg/L	100	(70-130)	20	0.77
MSD2_202004240095	Magnesium Total ICAP	1.8	20	21.9	mg/L	101	(70-130)	20	0.90
LCS1	Potassium Total ICAP		20	19.4	mg/L	97	(85-115)		
LCS2	Potassium Total ICAP		20	19.3	mg/L	97	(85-115)	20	0.52
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.521	mg/L	52	(50-150)		
MS_202004230379	Potassium Total ICAP	ND	20	20.0	mg/L	95	(70-130)		
MS2_202004240095	Potassium Total ICAP	2.8	20	21.4	mg/L	93	(70-130)		
MSD_202004230379	Potassium Total ICAP	ND	20	19.9	mg/L	95	(70-130)	20	0.52
MSD2_202004240095	Potassium Total ICAP	2.8	20	21.6	mg/L	95	(70-130)	20	1.6
LCS1	Sodium Total ICAP		50	48.4	mg/L	97	(85-115)		
LCS2	Sodium Total ICAP		50	48.3	mg/L	97	(85-115)	20	0.21
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.844	mg/L	84	(50-150)		
MS_202004230379	Sodium Total ICAP	19	50	67.5	mg/L	97	(70-130)		
MS2_202004240095	Sodium Total ICAP	13	50	61.1	mg/L	96	(70-130)		
MSD_202004230379	Sodium Total ICAP	19	50	67.1	mg/L	97	(70-130)	20	0.61
MSD2_202004240095	Sodium Total ICAP	13	50	61.8	mg/L	98	(70-130)	20	1.2

Total Organic Carbon by SM 5310C

Analytical Batch: 1244980

Analysis Date: 04/28/2020

LCS1	Total Organic Carbon		5	5.33	mg/L	107	(90-110)		
LCS2	Total Organic Carbon		5	5.27	mg/L	105	(90-110)	20	1.1
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.276	mg/L	138	(50-150)		
MS_202004200247	Total Organic Carbon	0.60	4	4.78	mg/L	105	(80-120)		
MS2_202004240248	Total Organic Carbon	3.0	2	5.26	mg/L	114	(80-120)		
MSD_202004200247	Total Organic Carbon	0.60	4	4.78	mg/L	104	(80-120)	20	0.021
MSD2_202004240248	Total Organic Carbon	3.0	2	5.25	mg/L	113	(80-120)	20	0.21

Total Organic Carbon by SM 5310C

Analytical Batch: 1244982

Analysis Date: 04/29/2020

LCS1	Total Organic Carbon		5	5.36	mg/L	107	(90-110)		
LCS2	Total Organic Carbon		5	5.22	mg/L	104	(90-110)	20	2.6

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.289	mg/L	144	(50-150)		
MS_202004200254	Total Organic Carbon	0.57	4	4.85	mg/L	107	(80-120)		
MSD_202004200254	Total Organic Carbon	0.57	4	5.53	mg/L	<u>124</u>	(80-120)	20	13

EPA Method 537.1 by EPA 537.1

Prep Batch: 1244691 Analytical Batch: 1245239

Analysis Date: 04/28/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0232	ug/L	99	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)	30	1.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00162	ug/L	86	(50-150)		
MS2_202004240246	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0520	ug/L	110	(70-130)		
MSD2_202004240246	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0492	ug/L	104	(70-130)	30	5.5
LCS1	13C2-PFDA (S)		100	114	%	114	(70-130)		
LCS2	13C2-PFDA (S)		100	115	%	115	(70-130)		
MBLK	13C2-PFDA (S)			103	%	103	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	114	%	114	(70-130)		
MS2_202004240246	13C2-PFDA (S)		100	112	%	112	(70-130)		
MSD2_202004240246	13C2-PFDA (S)		100	120	%	120	(70-130)		
LCS1	13C2-PFHxA (S)		100	113	%	113	(70-130)		
LCS2	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MBLK	13C2-PFHxA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	117	%	117	(70-130)		
MS2_202004240246	13C2-PFHxA (S)		100	115	%	115	(70-130)		
MSD2_202004240246	13C2-PFHxA (S)		100	122	%	122	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS2_202004240246	13C2-PFOA- IS#1 (I)		100	98.7	%	99	(50-150)		
MSD2_202004240246	13C2-PFOA- IS#1 (I)		100	94.8	%	95	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	99.6	%	100	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MBLK	13C3-HFPO-DA (S)			92.0	%	92	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
MS2_202004240246	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
MSD2_202004240246	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	96.2	%	96	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.4	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	94.8	%	95	(50-150)		
MS2_202004240246	13C4-PFOS- IS#2 (I)		100	92.0	%	92	(50-150)		
MSD2_202004240246	13C4-PFOS- IS#2 (I)		100	93.0	%	93	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0253	ug/L	107	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0260	ug/L	110	(70-130)	30	2.7
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00196	ug/L	104	(50-150)		
MS2_202004240246	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0502	ug/L	104	(70-130)		
MSD2_202004240246	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0506	ug/L	104	(70-130)	30	0.71
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0268	ug/L	115	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0264	ug/L	113	(70-130)	30	1.5
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00192	ug/L	103	(50-150)		
MS2_202004240246	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0545	ug/L	117	(70-130)		
MSD2_202004240246	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0510	ug/L	109	(70-130)	30	6.6
LCS1	d3-NMeFOSAA (I)		100	87.3	%	87	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	90.3	%	90	(50-150)		
MBLK	d3-NMeFOSAA (I)			92.2	%	92	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	91.1	%	91	(50-150)		
MS2_202004240246	d3-NMeFOSAA (I)		100	90.3	%	90	(50-150)		
MSD2_202004240246	d3-NMeFOSAA (I)		100	87.7	%	88	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	115	%	115	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
MBLK	d5-NEtFOSAA (S)			106	%	106	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	118	%	118	(70-130)		
MS2_202004240246	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
MSD2_202004240246	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0243	ug/L	97	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0247	ug/L	99	(70-130)	30	1.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00187	ug/L	94	(50-150)		
MS2_202004240246	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0508	ug/L	102	(70-130)		
MSD2_202004240246	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0506	ug/L	101	(70-130)	30	0.49
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0294	ug/L	118	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0290	ug/L	116	(70-130)	30	1.4
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 866700
 Project: 0250000
 Group: WRD Pilot

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS2_202004240246	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0546	ug/L	109	(70-130)		
MSD2_202004240246	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0554	ug/L	111	(70-130)	30	1.5
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0290	ug/L	116	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0286	ug/L	114	(70-130)	30	1.7
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	106	(50-150)		
MS2_202004240246	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0545	ug/L	109	(70-130)		
MSD2_202004240246	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0525	ug/L	105	(70-130)	30	3.8
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0235	ug/L	106	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0212	ug/L	96	(70-130)	30	9.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00179	ug/L	101	(50-150)		
MS2_202004240246	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0496	ug/L	112	(70-130)		
MSD2_202004240246	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0463	ug/L	105	(70-130)	30	7.0
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0289	ug/L	116	(70-130)	30	2.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00214	ug/L	107	(50-150)		
MS2_202004240246	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0552	ug/L	110	(70-130)		
MSD2_202004240246	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0556	ug/L	111	(70-130)	30	0.74
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0290	ug/L	116	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0300	ug/L	120	(70-130)	30	3.4
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00207	ug/L	104	(50-150)		
MS2_202004240246	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0592	ug/L	118	(70-130)		
MSD2_202004240246	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0592	ug/L	118	(70-130)	30	0.052
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0301	ug/L	120	(70-130)	30	6.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00230	ug/L	115	(50-150)		
MS2_202004240246	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0565	ug/L	113	(70-130)		
MSD2_202004240246	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0585	ug/L	117	(70-130)	30	3.5
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0277	ug/L	121	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0269	ug/L	118	(70-130)	30	2.9
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00207	ug/L	113	(50-150)		
MS2_202004240246	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0533	ug/L	117	(70-130)		

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD2_202004240246	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0524	ug/L	115	(70-130)	30	1.5
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0274	ug/L	110	(70-130)	30	0.37
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00210	ug/L	105	(50-150)		
MS2_202004240246	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0542	ug/L	108	(70-130)		
MSD2_202004240246	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0579	ug/L	116	(70-130)	30	6.5
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0289	ug/L	116	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0295	ug/L	118	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00228	ug/L	114	(50-150)		
MS2_202004240246	Perfluorononanoic acid (PFNA)	ND	0.05	0.0562	ug/L	112	(70-130)		
MSD2_202004240246	Perfluorononanoic acid (PFNA)	ND	0.05	0.0581	ug/L	116	(70-130)	30	3.2
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0271	ug/L	117	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0269	ug/L	116	(70-130)	30	0.74
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00210	ug/L	113	(50-150)		
MS2_202004240246	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0540	ug/L	117	(70-130)		
MSD2_202004240246	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0522	ug/L	113	(70-130)	30	3.5
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0297	ug/L	119	(70-130)	30	1.7
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00232	ug/L	116	(50-150)		
MS2_202004240246	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0562	ug/L	112	(70-130)		
MSD2_202004240246	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0584	ug/L	117	(70-130)	30	3.8
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0297	ug/L	119	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0308	ug/L	123	(70-130)	30	3.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00204	ug/L	102	(50-150)		
MS2_202004240246	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0598	ug/L	120	(70-130)		
MSD2_202004240246	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0596	ug/L	119	(70-130)	30	0.34
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0314	ug/L	126	(70-130)	30	4.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202004240246	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0614	ug/L	123	(70-130)		
MSD2_202004240246	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0599	ug/L	120	(70-130)	30	2.5
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0278	ug/L	111	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0288	ug/L	115	(70-130)	30	3.9
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00215	ug/L	108	(50-150)		
MS2_202004240246	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0547	ug/L	109	(70-130)		
MSD2_202004240246	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0571	ug/L	114	(70-130)	30	4.3

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1245711

Analysis Date: 04/30/2020

DUP_202003140026	Total Suspended Solids (TSS)	290		288	mg/L		(0-10)	10	2.1
DUP_202004270026	Total Suspended Solids (TSS)	280		306	mg/L		(0-10)	10	8.2
LCS1	Total Suspended Solids (TSS)		175	164	mg/L	94	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	168	mg/L	96	(71-107)	20	2.4
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	9.00	mg/L	90	(50-150)		

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1245726

Analysis Date: 04/30/2020

DUP_202004230379	Total Dissolved Solid (TDS)	110		114	mg/L		(0-10)	10	0.0
DUP_202004240247	Total Dissolved Solid (TDS)	530		550	mg/L		(0-10)	10	3.7
LCS1	Total Dissolved Solid (TDS)		175	156	mg/L	89	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	672	mg/L	96	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	5.00	mg/L	50	(50-150)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1246143

Analysis Date: 05/03/2020

LCS1	Hexavalent chromium(Dissolved)		2	2.05	ug/L	103	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	2.05	ug/L	103	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0187	ug/L	94	(50-150)		
MS_202004200254	Hexavalent chromium(Dissolved)	0.69	2	2.86	ug/L	108	(90-110)		
MS_202004280745	Hexavalent chromium(Dissolved)	0.031	2	2.18	ug/L	107	(90-110)		
MSD_202004200254	Hexavalent chromium(Dissolved)	0.69	2	2.84	ug/L	107	(90-110)	20	0.54
MSD_202004280745	Hexavalent chromium(Dissolved)	0.031	2	2.21	ug/L	109	(90-110)	20	1.6

EPA Method 537.1 by EPA 537.1

Prep Batch: 1245600 Analytical Batch: 1246146

Analysis Date: 05/04/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0520	ug/L	110	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0513	ug/L	109	(70-130)	30	1.4

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00198	ug/L	105	(50-150)		
MS2_202004290336	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0506	ug/L	107	(70-130)		
MSD2_202004290336	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0528	ug/L	112	(70-130)	30	4.5
LCS3	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFDA (S)		100	104	%	104	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	101	%	101	(70-130)		
MS2_202004290336	13C2-PFDA (S)		100	101	%	101	(70-130)		
MSD2_202004290336	13C2-PFDA (S)		100	103	%	103	(70-130)		
LCS3	13C2-PFHxA (S)		100	115	%	115	(70-130)		
LCS4	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MBLK	13C2-PFHxA (S)			117	%	117	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MS2_202004290336	13C2-PFHxA (S)		100	114	%	114	(70-130)		
MSD2_202004290336	13C2-PFHxA (S)		100	112	%	112	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.7	%	99	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	98.3	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			99.8	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.6	%	100	(50-150)		
MS2_202004290336	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MSD2_202004290336	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MBLK	13C3-HFPO-DA (S)			106	%	106	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS2_202004290336	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
MSD2_202004290336	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.5	%	100	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.2	%	98	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.0	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	95.9	%	96	(50-150)		
MS2_202004290336	13C4-PFOS- IS#2 (I)		100	99.9	%	100	(50-150)		
MSD2_202004290336	13C4-PFOS- IS#2 (I)		100	98.2	%	98	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0560	ug/L	116	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0538	ug/L	111	(70-130)	30	4.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00216	ug/L	114	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 866700
 Project: 0250000
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202004290336	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0526	ug/L	108	(70-130)		
MSD2_202004290336	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0531	ug/L	109	(70-130)	30	0.96
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0518	ug/L	111	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0503	ug/L	108	(70-130)	30	2.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00194	ug/L	104	(50-150)		
MS2_202004290336	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0494	ug/L	106	(70-130)		
MSD2_202004290336	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0510	ug/L	109	(70-130)	30	3.2
LCS3	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	95.8	%	96	(50-150)		
MBLK	d3-NMeFOSAA (I)			97.0	%	97	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	98.8	%	99	(50-150)		
MS2_202004290336	d3-NMeFOSAA (I)		100	98.2	%	98	(50-150)		
MSD2_202004290336	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	97.6	%	98	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	98.4	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			101	%	101	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MS2_202004290336	d5-NEtFOSAA (S)		100	94.7	%	95	(70-130)		
MSD2_202004290336	d5-NEtFOSAA (S)		100	96.9	%	97	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0572	ug/L	114	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0559	ug/L	112	(70-130)	30	2.3
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00217	ug/L	108	(50-150)		
MS2_202004290336	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0543	ug/L	109	(70-130)		
MSD2_202004290336	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0535	ug/L	107	(70-130)	30	1.5
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0536	ug/L	107	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0536	ug/L	107	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00199	ug/L	100	(50-150)		
MS2_202004290336	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0521	ug/L	104	(70-130)		
MSD2_202004290336	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0525	ug/L	105	(70-130)	30	0.76
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0529	ug/L	106	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0527	ug/L	105	(70-130)	30	0.38
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	105	(50-150)		
MS2_202004290336	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0512	ug/L	102	(70-130)		
MSD2_202004290336	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0520	ug/L	104	(70-130)	30	1.6

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0491	ug/L	111	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0498	ug/L	112	(70-130)	30	1.4
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00190	ug/L	108	(50-150)		
MS2_202004290336	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0504	ug/L	113	(70-130)		
MSD2_202004290336	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0511	ug/L	115	(70-130)	30	1.5
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0565	ug/L	113	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0531	ug/L	106	(70-130)	30	6.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00207	ug/L	103	(50-150)		
MS2_202004290336	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0532	ug/L	106	(70-130)		
MSD2_202004290336	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0557	ug/L	111	(70-130)	30	4.6
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0597	ug/L	119	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0548	ug/L	110	(70-130)	30	8.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00211	ug/L	106	(50-150)		
MS2_202004290336	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0548	ug/L	110	(70-130)		
MSD2_202004290336	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0554	ug/L	111	(70-130)	30	0.99
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0607	ug/L	121	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0580	ug/L	116	(70-130)	30	4.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00224	ug/L	112	(50-150)		
MS2_202004290336	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0569	ug/L	114	(70-130)		
MSD2_202004290336	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0576	ug/L	115	(70-130)	30	1.2
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0517	ug/L	113	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0525	ug/L	115	(70-130)	30	1.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00211	ug/L	115	(50-150)		
MS2_202004290336	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0514	ug/L	113	(70-130)		
MSD2_202004290336	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0530	ug/L	116	(70-130)	30	3.1
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0588	ug/L	118	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0577	ug/L	115	(70-130)	30	1.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00235	ug/L	118	(50-150)		
MS2_202004290336	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0568	ug/L	113	(70-130)		
MSD2_202004290336	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0583	ug/L	116	(70-130)	30	2.6
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0560	ug/L	112	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0561	ug/L	112	(70-130)	30	0.18

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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 Project: 0250000
 Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00229	ug/L	115	(50-150)		
MS2_202004290336	Perfluorononanoic acid (PFNA)	ND	0.05	0.0546	ug/L	109	(70-130)		
MSD2_202004290336	Perfluorononanoic acid (PFNA)	ND	0.05	0.0560	ug/L	112	(70-130)	30	2.5
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0514	ug/L	111	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0525	ug/L	113	(70-130)	30	2.1
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00199	ug/L	108	(50-150)		
MS2_202004290336	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0504	ug/L	108	(70-130)		
MSD2_202004290336	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0505	ug/L	109	(70-130)	30	0.25
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0575	ug/L	115	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0566	ug/L	113	(70-130)	30	1.6
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00227	ug/L	113	(50-150)		
MS2_202004290336	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0559	ug/L	111	(70-130)		
MSD2_202004290336	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0561	ug/L	112	(70-130)	30	0.36
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0617	ug/L	123	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0610	ug/L	122	(70-130)	30	1.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00249	ug/L	125	(50-150)		
MS2_202004290336	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0598	ug/L	119	(70-130)		
MSD2_202004290336	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0615	ug/L	123	(70-130)	30	2.7
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0577	ug/L	115	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0541	ug/L	108	(70-130)	30	6.4
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00215	ug/L	108	(50-150)		
MS2_202004290336	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0516	ug/L	103	(70-130)		
MSD2_202004290336	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0536	ug/L	107	(70-130)	30	3.8
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0553	ug/L	111	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0533	ug/L	107	(70-130)	30	3.7
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00206	ug/L	103	(50-150)		
MS2_202004290336	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0536	ug/L	107	(70-130)		
MSD2_202004290336	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0537	ug/L	107	(70-130)	30	0.19

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1246155

Analysis Date: 05/04/2020

LCS1	Alkalinity in CaCO3 units	100	98.9	mg/L	99	(90-110)
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Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 866700
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Group: WRD Pilot

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Alkalinity in CaCO3 units		100	98.8	mg/L	99	(90-110)	20	0.10
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.88	mg/L	94	(50-150)		
MS_202004230173	Alkalinity in CaCO3 units	43	100	144	mg/L	101	(80-120)		
MS_202004230210	Alkalinity in CaCO3 units	150	100	172	mg/L	<u>25</u>	(80-120)		
MSD_202004230173	Alkalinity in CaCO3 units	43	100	145	mg/L	102	(80-120)	20	0.39
MSD_202004230210	Alkalinity in CaCO3 units	150	100	170	mg/L	<u>23</u>	(80-120)	20	0.93

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 05/12/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 05/12/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 05/12/2020

Quant Report - Page 1 of 1

Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-26753-1
Client Project/Site: 866700

For:

Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



*Authorized for release by:
5/1/2020 4:08:45 PM*

Lori Thompson, Project Manager I
(714)895-5494
lorithompson@eurofinsus.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 866700

Job ID: 570-26753-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 866700

Job ID: 570-26753-1

Job ID: 570-26753-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-26753-1

Comments

No additional comments.

Receipt

The samples were received on 4/27/2020 11:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 866700

Job ID: 570-26753-1

Client Sample ID: 202004200247

Lab Sample ID: 570-26753-1

No Detections.

Client Sample ID: 202004200254

Lab Sample ID: 570-26753-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	1.15		0.962	0.770	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 866700

Job ID: 570-26753-1

General Chemistry

Client Sample ID: 202004200247
Date Collected: 04/24/20 14:00
Date Received: 04/27/20 11:55

Lab Sample ID: 570-26753-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.955	0.764	mg/L		04/29/20 09:24	04/29/20 09:24	1

Client Sample ID: 202004200254
Date Collected: 04/24/20 11:30
Date Received: 04/27/20 11:55

Lab Sample ID: 570-26753-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	1.15		0.962	0.770	mg/L		04/29/20 09:24	04/29/20 09:24	1

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QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 866700

Job ID: 570-26753-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-65948/1-A
Matrix: Water
Analysis Batch: 66061

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 65948

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		04/29/20 09:24	04/29/20 09:24	1

Lab Sample ID: LCS 570-65948/2-A
Matrix: Water
Analysis Batch: 66061

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 65948

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	36.90		mg/L		92	78 - 114

Lab Sample ID: LCSD 570-65948/3-A
Matrix: Water
Analysis Batch: 66061

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 65948

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.70		mg/L		92	78 - 114	1	18

Lab Sample ID: 570-26621-B-1-A MS
Matrix: Water
Analysis Batch: 66061

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 65948

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	ND		38.1	34.95		mg/L		92	78 - 114

Lab Sample ID: 570-26621-B-1-B MSD
Matrix: Water
Analysis Batch: 66061

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 65948

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	ND		38.0	34.51		mg/L		91	78 - 114	1	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 866700

Job ID: 570-26753-1

General Chemistry

Prep Batch: 65948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-26753-1	202004200247	Total/NA	Water	1664A	
570-26753-2	202004200254	Total/NA	Water	1664A	
MB 570-65948/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-65948/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-65948/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
570-26621-B-1-A MS	Matrix Spike	Total/NA	Water	1664A	
570-26621-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	

Analysis Batch: 66061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-26753-1	202004200247	Total/NA	Water	1664A	65948
570-26753-2	202004200254	Total/NA	Water	1664A	65948
MB 570-65948/1-A	Method Blank	Total/NA	Water	1664A	65948
LCS 570-65948/2-A	Lab Control Sample	Total/NA	Water	1664A	65948
LCSD 570-65948/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	65948
570-26621-B-1-A MS	Matrix Spike	Total/NA	Water	1664A	65948
570-26621-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	65948

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 866700

Job ID: 570-26753-1

Client Sample ID: 202004200247

Lab Sample ID: 570-26753-1

Date Collected: 04/24/20 14:00

Matrix: Water

Date Received: 04/27/20 11:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1047 mL	1000 mL	65948	04/29/20 09:24	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			66061	04/29/20 09:24	UWEZ	ECL 1

Instrument ID: NOEQUIP

Client Sample ID: 202004200254

Lab Sample ID: 570-26753-2

Date Collected: 04/24/20 11:30

Matrix: Water

Date Received: 04/27/20 11:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1039 mL	1000 mL	65948	04/29/20 09:24	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			66061	04/29/20 09:24	UWEZ	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 866700

Job ID: 570-26753-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 866700

Job ID: 570-26753-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 866700

Job ID: 570-26753-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-26753-1	202004200247	Water	04/24/20 14:00	04/27/20 11:55	
570-26753-2	202004200254	Water	04/24/20 11:30	04/27/20 11:55	

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Loc: 570
26753

CHAIN-OF-CUSTODY RECORD

Date: 4-24-2020

Page 1 of 1

866700



570-26753 Chain of Custody



FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT)	
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		LABORATORY: Eurofins Eaton Analytical		REQUESTED ANALYSES Please check box or fill in blank as needed.	
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD		SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rtorres@gsi-net.com. Provide EDD of sample results		Sulfate, Nitrate (as N), Nitrate (as NO ₃), Chloride (EPA 300.0) Alkalinity (as CaCO ₃), (SM 2320B) Uranium, Arsenic, Manganese (EPA 200.8) Perchlorate (EPA 314.0) Hexavalent Chromium (EPA 218.6) Fe, Na, K, Ca, Mg (EPA 200.7) Total Hardness as CaCO ₃ (SM 2340B) TDS (E160.1/SM 2540C) TSS (SM 2540D) Oil & Grease (EPA 1664) TOC (SM 5310C) VOCs (EPA 524.2)	
LAB USE ONLY		SAMPLING		NO. OF CONT.	
SAMPLE ID		DATE		TIME	
MATRIX		DATE		TIME	
UNPRESERVED		PRESERVED		FIELD FILTERED	
1 MB-INF-20200424	4-24	1400	Water	14	X
2 MB-INF-DUP-20200424	4-24	1130	Water	2	X
3 LH-INF-20200424	4-24	1130	Water	14	X
4 LH-INF-DUP-20200424	4-24	1131	Water	2	X
5 FB-1-20200424	4-24	1150	Water	1	X
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 4-24-2020 Time: 6:23	
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 4/24/20 Time: 6:24	
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 4/27/20 Time: 1:55	

3-7-28 506

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INTERNAL CHAIN OF CUSTODY RECORD



EEA Foller Number: 846702

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 0108 (Observation = 1412 °C) (Corr. Factor = 0.2 °C) (Final = 1410 °C)

TYPE OF ICE: Real Synthetic No Ice Condition of Ice: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up Walk-In FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 - (Observation - °C) (Corr. Factor - °C) (Final - °C)	2 - (Observation - °C) (Corr. Factor - °C) (Final - °C)
3 - (Observation - °C) (Corr. Factor - °C) (Final - °C)	4 - (Observation - °C) (Corr. Factor - °C) (Final - °C)

- 4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)
- 5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____
- 6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA Headspace: No Samples with Headspace (see below): _____
 Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients: None/<6

Samp ID	Bottle #	None/<6	>6min

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors):

REPORTED BY: Chuck Brocks SIGNATURE: Chuck Brocks PRINT NAME: Chuck Brocks COMPANY/TITLE: EuroLins Eaton Analytical DATE: 4.24.20 TIME: 1624



Submittal Form

Date: 4/30/2020

***REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**
Report & Invoice must have the Folder # 866700 Job # 1000014

Report all quality control data according to Method, include dates analyzed, Date extracted (if extracted), and Method reference on the report.
Results must have Complete data & QC with Approval Signature.

Ship To:

Eurofins CalScience
7440 Lincoln Way

Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 866700
Report Due: 05/08/2020

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: us20_subcontract@eurofinsus.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the
Specified State Certification # and
Exp Date for requested tests + matrix.
Samples from: CALIFORNIA

Sample ID 202004200247	Client Sample ID for reference onl MB-INF-20200424	Sample Date & Time 04/24/20 1400 DW	Matrix DW	PWS Systemcode	PWSID JLS
Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:	

Method EPA 1664
Prep Method Analysis Requested
Oil and Grease by 1664(subbed)

Sample ID 202004200254	Client Sample ID for reference onl LH-INF-20200424	Sample Date & Time 04/24/20 1130 DW	Matrix DW	PWS Systemcode	PWSID JLS
Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:	

Method EPA 1664
Prep Method Analysis Requested
Oil and Grease by 1664(subbed)

Relinquished by: _____ Date _____ Time _____

Received by: _____ Date _____ Time _____

Relinquished by: _____ Date _____ Time _____

Received by: _____ Date _____ Time _____

Sample Control

Sample Control

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS
An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-26753-1

Login Number: 26753

List Number: 1

Creator: Andujo, Italy

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles

REPORT REVISED,
replaces the original report.



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 869571
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report,

Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 869571
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **May 06, 2020 at 1416**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202005060507</u>	GAC-5-20200506 Static ID: 537.1 @537.1	05/06/2020 1315
<u>202005060508</u>	GAC-6-20200506 Static ID: 537.1 @537.1	05/06/2020 1318
<u>202005060509</u>	GAC-7-20200506 Static ID: 537.1 @537.1	05/06/2020 1321
<u>202005060510</u>	GAC-8-20200506 Static ID: 537.1 @537.1	05/06/2020 1324
<u>202005060511</u>	IX-5-20200506 Static ID: 537.1 @537.1	05/06/2020 1327
<u>202005060512</u>	IX-6-20200506 Static ID: 537.1 @537.1	05/06/2020 1330
<u>202005060513</u>	IX-7-20200506 Static ID: 537.1 @537.1	05/06/2020 1333
<u>202005060514</u>	IX-8-20200506 Static ID: 537.1 @537.1	05/06/2020 1336
<u>202005060515</u>	MB-INF-20200506 @537.1 Chloride	05/06/2020 1340
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon

Test Description

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Attn: Joseph Liles
Phone: 562-275-4226

Client ID: WRD
Folder #: 869571
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Sample #	Sample ID	Sample Date
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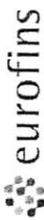
809571

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical	PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID: PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) <u>RDT</u>	REQUESTED ANALYSES Please check box or fill in blank as needed.												
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD														
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdortorres@gsi-net.com. Provide EDD of sample results														
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)		
		DATE	TIME			Unpreserved	Preserved	Field Filtered						
	GAC-1	Water	Water	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	GAC-2	Water	Water	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	GAC-3	Water	Water	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	GAC-4	Water	Water	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	W-1	Water	Water	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	W-2	Water	Water	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	W-3	Water	Water	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	W-4	Water	Water	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	LINE	Water	Water	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	LINE-DUP	Water	Water	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	GAC-5	5-6	1315	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	GAC-6	↓	1318	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	GAC-7	↓	1321	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
	GAC-8	↓	1324	Water	2	Unpreserved	Preserved	Field Filtered	X	X	X	X		
Relinquished by: (Signature) <u>[Signature]</u>									Received by: (Signature) <u>[Signature]</u>				Date: <u>5-6</u>	Time: <u>1415</u>
Relinquished by: (Signature) <u>[Signature]</u>									Received by: (Signature) <u>[Signature]</u>				Date: <u>5-6-20</u>	Time: <u>1416</u>
Relinquished by: (Signature) <u>[Signature]</u>									Received by: (Signature) <u>[Signature]</u>				Date:	Time:



809571

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302																																																																																																									
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		LAB CONTACT: Sophia Liang																																																																																																									
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Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 809571

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 649A (Observation = 18.8 °C) (Corr. Factor = -0.3 °C) (Final = 18.5 °C)

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251.552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: <u>you</u>	PRINT NAME: <u>youc hicks</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>5-6-20</u>	TIME: <u>1416</u>
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Tel: (626) 386-1100
Fax: (626) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 869571
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/06/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202005060515	<u>MB-INF-20200506</u>				
05/12/2020 22:12	Alkalinity in CaCO3 units		170		mg/L	2.0
05/06/2020 21:18	Chloride		53	250	mg/L	2.5
05/06/2020 21:18	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
05/06/2020 21:18	Nitrate as NO3 (calc)		10	45	mg/L	2.2
05/08/2020 20:55	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
05/08/2020 20:55	Perfluorodecanoic acid (PFDA)		0.0021		ug/L	0.0020
05/08/2020 20:55	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
05/08/2020 20:55	Perfluorohexanesulfonic acid (PFHxS)		0.0068		ug/L	0.0020
05/08/2020 20:55	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
05/08/2020 20:55	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
05/08/2020 20:55	Perfluorooctanesulfonic acid (PFOS)		0.035		ug/L	0.0020
05/08/2020 20:55	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
05/06/2020 21:18	Sulfate		80	250	mg/L	2.5
05/06/2020 21:18	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
05/13/2020 23:27	Total Organic Carbon		0.78		mg/L	0.30

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Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/06/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-5-20200506 (202005060507)						Sampled on 05/06/2020 1315			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	13C2-PFDA	100	%		1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	13C2-PFHxA	105	%		1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	13C3-HFPO-DA	91	%		1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	d3-NMeFOSAA	101	%		1
05/07/20	05/08/20 19:38	1247007	1247621	(EPA 537.1)	d5-NetFOSAA	108	%		1

GAC-6-20200506 (202005060508)						Sampled on 05/06/2020 1318			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/06/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	13C2-PFDA	95	%		1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	13C2-PFHxA	103	%		1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	13C3-HFPO-DA	90	%		1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	d3-NMeFOSAA	103	%		1
05/07/20	05/08/20 19:48	1247007	1247621	(EPA 537.1)	d5-NetFOSAA	106	%		1

GAC-7-20200506 (202005060509)

Static ID: 537.1

Sampled on 05/06/2020 1321

EPA 537.1 - EPA Method 537.1

05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.
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Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/06/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	13C2-PFDA	101	%		1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	13C2-PFHxA	104	%		1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	13C3-HFPO-DA	89	%		1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	d3-NMeFOSAA	100	%		1
05/07/20	05/08/20 19:57	1247007	1247621	(EPA 537.1)	d5-NETFOSAA	110	%		1

GAC-8-20200506 (202005060510)

Static ID: 537.1

Sampled on 05/06/2020 1324

EPA 537.1 - EPA Method 537.1

05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane -sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-su lfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/06/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	13C2-PFDA	99	%		1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	13C2-PFHxA	103	%		1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	13C3-HFPO-DA	90	%		1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	d3-NMeFOSAA	102	%		1
05/07/20	05/08/20 20:17	1247007	1247621	(EPA 537.1)	d5-NEtFOSAA	107	%		1

IX-5-20200506 (202005060511)

Sampled on 05/06/2020 1327

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/06/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	13C2-PFDA	101	%		1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	13C2-PFHxA	110	%		1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	13C3-HFPO-DA	97	%		1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	d3-NMeFOSAA	103	%		1
05/07/20	05/08/20 20:26	1247007	1247621	(EPA 537.1)	d5-NEtFOSAA	105	%		1

IX-6-20200506 (202005060512)

Static ID: 537.1

Sampled on 05/06/2020 1330

EPA 537.1 - EPA Method 537.1

05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/06/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	13C2-PFDA	97	%		1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	13C2-PFHxA	107	%		1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	13C3-HFPO-DA	95	%		1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	d3-NMeFOSAA	102	%		1
05/07/20	05/08/20 18:31	1247007	1247621	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-7-20200506 (202005060513)

Sampled on 05/06/2020 1333

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	11-chloroicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	13C2-PFDA	101	%		1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	13C2-PFHxA	111	%		1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	13C3-HFPO-DA	96	%		1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/06/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	d3-NMeFOSAA	105	%		1
05/07/20	05/08/20 20:36	1247007	1247621	(EPA 537.1)	d5-NEtFOSAA	108	%		1
IX-8-20200506 (202005060514)						Sampled on 05/06/2020 1336			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	13C2-PFDA	96	%		1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	13C2-PFHxA	106	%		1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	13C3-HFPO-DA	91	%		1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	d3-NMeFOSAA	101	%		1
05/07/20	05/08/20 20:45	1247007	1247621	(EPA 537.1)	d5-NEtFOSAA	104	%		1

MB-INF-20200506 (202005060515)

Sampled on 05/06/2020 1340

SM 5310C - Total Organic Carbon

Rounding on totals after summation.
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Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/06/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	05/13/20 23:27		1248620	(SM 5310C)	Total Organic Carbon	0.78	mg/L	0.30	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	05/06/20 21:18		1246824	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
	05/06/20 21:18		1246824	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
	05/06/20 21:18		1246824	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	05/06/20 21:18		1246824	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	05/06/20 21:18		1246833	(EPA 300.0)	Chloride	53	mg/L	2.5	5
	05/06/20 21:18		1246833	(EPA 300.0)	Sulfate	80	mg/L	2.5	5
EPA 537.1 - EPA Method 537.1									
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0021	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0068	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.035	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	13C2-PFDA	104	%		1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	13C2-PFHxA	107	%		1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	13C3-HFPO-DA	95	%		1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1

Rounding on totals after summation.
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Laboratory Data

Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/06/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	d3-NMeFOSAA	102	%		1
05/07/20	05/08/20 20:55	1247007	1247621	(EPA 537.1)	d5-NEtFOSAA	111	%		1
SM 2320B - Alkalinity in CaCO3 units									
	05/12/20 22:12		1247998	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 869571
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1246824

202005060515 MB-INF-20200506

Analysis Date: 05/06/2020

Analyzed by: B9PD

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1246833

202005060515 MB-INF-20200506

Analysis Date: 05/06/2020

Analyzed by: B9PD

EPA Method 537.1

Prep Batch: 1247007 Analytical Batch: 1247621

202005060507 GAC-5-20200506
 202005060508 GAC-6-20200506
 202005060509 GAC-7-20200506
 202005060510 GAC-8-20200506
 202005060511 IX-5-20200506
 202005060512 IX-6-20200506
 202005060513 IX-7-20200506
 202005060514 IX-8-20200506
 202005060515 MB-INF-20200506

Analysis Date: 05/08/2020

Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ

Alkalinity in CaCO3 units

Analytical Batch: 1247998

202005060515 MB-INF-20200506

Analysis Date: 05/12/2020

Analyzed by: ZB2Z

Total Organic Carbon

Analytical Batch: 1248620

202005060515 MB-INF-20200506

Analysis Date: 05/13/2020

Analyzed by: ZS6I

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1246824					Analysis Date: 05/06/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.51	mg/L	101	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.62	mg/L	105	(90-110)	20	4.3
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0487	mg/L	97	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0126	mg/L	101	(50-150)		
MS_202005060443	Nitrate as Nitrogen by IC	9.2	6.5	15.9	mg/L	107	(80-120)		
MS_202005060515	Nitrate as Nitrogen by IC	2.4	6.5	8.98	mg/L	106	(80-120)		
MSD_202005060443	Nitrate as Nitrogen by IC	9.2	6.5	15.8	mg/L	106	(80-120)	20	0.54
MSD_202005060515	Nitrate as Nitrogen by IC	2.4	6.5	8.98	mg/L	106	(80-120)	20	0.089
LCS1	Nitrite Nitrogen by IC		1	1.00	mg/L	101	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.01	mg/L	101	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0463	mg/L	93	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0117	mg/L	94	(50-150)		
MS_202005060443	Nitrite Nitrogen by IC	ND	2.5	2.47	mg/L	99	(80-120)		
MS_202005060515	Nitrite Nitrogen by IC	ND	2.5	2.56	mg/L	102	(80-120)		
MSD_202005060443	Nitrite Nitrogen by IC	ND	2.5	2.47	mg/L	99	(80-120)	20	0.17
MSD_202005060515	Nitrite Nitrogen by IC	ND	2.5	2.55	mg/L	102	(80-120)	20	0.48
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1246833					Analysis Date: 05/06/2020				
LCS1	Chloride		25	25.8	mg/L	103	(90-110)		
LCS2	Chloride		25	26.7	mg/L	107	(90-110)	20	3.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.439	mg/L	88	(50-150)		
MS_202005060443	Chloride	140	65	202	mg/L	105	(80-120)		
MS_202005060515	Chloride	53	65	124	mg/L	114	(80-120)		
MSD_202005060443	Chloride	140	65	202	mg/L	104	(80-120)	20	0.0099
MSD_202005060515	Chloride	53	65	124	mg/L	113	(80-120)	20	0.35
LCS1	Sulfate		50	51.0	mg/L	102	(90-110)		
LCS2	Sulfate		50	52.5	mg/L	105	(90-110)	20	2.9
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.961	mg/L	96	(50-150)		
MRL_W	Sulfate		0.25	0.247	mg/L	99	(50-150)		
MS_202005060443	Sulfate	160	125	300	mg/L	109	(80-120)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005060515	Sulfate	80	125	216	mg/L	109	(80-120)		
MSD_202005060443	Sulfate	160	125	298	mg/L	108	(80-120)	20	0.58
MSD_202005060515	Sulfate	80	125	216	mg/L	109	(80-120)	20	0.11

EPA Method 537.1 by EPA 537.1

Prep Batch: 1247007 Analytical Batch: 1247621

Analysis Date: 05/08/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202005060512	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0242	ug/L	103	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0245	ug/L	104	(70-130)	30	1.2
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00179	ug/L	95	(50-150)		
MS2_202004270089	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0491	ug/L	104	(70-130)		
DUP_202005060512	13C2-PFDA (S)			98.1	%	98	(70-130)		
LCS1	13C2-PFDA (S)		100	106	%	106	(70-130)		
LCS2	13C2-PFDA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFDA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	104	%	104	(70-130)		
MS2_202004270089	13C2-PFDA (S)		100	105	%	105	(70-130)		
DUP_202005060512	13C2-PFHxA (S)			108	%	108	(70-130)		
LCS1	13C2-PFHxA (S)		100	107	%	107	(70-130)		
LCS2	13C2-PFHxA (S)		100	110	%	110	(70-130)		
MBLK	13C2-PFHxA (S)			117	%	117	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	110	%	110	(70-130)		
MS2_202004270089	13C2-PFHxA (S)		100	117	%	117	(70-130)		
DUP_202005060512	13C2-PFOA- IS#1 (I)			110	%	110	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			93.9	%	94	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	98.2	%	98	(50-150)		
MS2_202004270089	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202005060512	13C3-HFPO-DA (S)			96.5	%	96	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	99.4	%	99	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	95.0	%	95	(70-130)		
MBLK	13C3-HFPO-DA (S)			107	%	107	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	97.0	%	97	(70-130)		
MS2_202004270089	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
DUP_202005060512	13C4-PFOS- IS#2 (I)			99.5	%	99	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	94.4	%	94	(50-150)		

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Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	13C4-PFOS- IS#2 (I)		100	94.6	%	95	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			92.4	%	92	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	92.6	%	93	(50-150)		
MS2_202004270089	13C4-PFOS- IS#2 (I)		100	94.7	%	95	(50-150)		
DUP_202005060512	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0269	ug/L	114	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0264	ug/L	112	(70-130)	30	1.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00215	ug/L	114	(50-150)		
MS2_202004270089	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0502	ug/L	104	(70-130)		
DUP_202005060512	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0264	ug/L	113	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0273	ug/L	117	(70-130)	30	3.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00196	ug/L	105	(50-150)		
MS2_202004270089	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0502	ug/L	108	(70-130)		
DUP_202005060512	d3-NMeFOSAA (I)			103	%	103	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	96.9	%	97	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	98.3	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			92.9	%	93	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	96.4	%	96	(50-150)		
MS2_202004270089	d3-NMeFOSAA (I)		100	99.4	%	99	(50-150)		
DUP_202005060512	d5-NEtFOSAA (S)			98.6	%	99	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MBLK	d5-NEtFOSAA (S)			108	%	108	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MS2_202004270089	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
DUP_202005060512	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0254	ug/L	102	(70-130)	30	4.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00206	ug/L	103	(50-150)		
MS2_202004270089	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0506	ug/L	101	(70-130)		
DUP_202005060512	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0307	ug/L	123	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0299	ug/L	120	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)\	RPD%
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00226	ug/L	113	(50-150)		
MS2_202004270089	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0555	ug/L	111	(70-130)		
DUP_202005060512	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0288	ug/L	115	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0291	ug/L	117	(70-130)	30	1.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	105	(50-150)		
MS2_202004270089	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0560	ug/L	112	(70-130)		
DUP_202005060512	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0251	ug/L	113	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0244	ug/L	110	(70-130)	30	2.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00191	ug/L	108	(50-150)		
MS2_202004270089	Perfluorobutanesulfonic acid (PFBS)	0.0042	0.044	0.0530	ug/L	110	(70-130)		
DUP_202005060512	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0277	ug/L	111	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0280	ug/L	112	(70-130)	30	1.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00220	ug/L	110	(50-150)		
MS2_202004270089	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0555	ug/L	111	(70-130)		
DUP_202005060512	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0274	ug/L	110	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0275	ug/L	110	(70-130)	30	0.36
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00209	ug/L	105	(50-150)		
MS2_202004270089	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0519	ug/L	104	(70-130)		
DUP_202005060512	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0309	ug/L	124	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0302	ug/L	121	(70-130)	30	2.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00244	ug/L	122	(50-150)		
MS2_202004270089	Perfluoroheptanoic acid (PFHpA)	0.0036	0.05	0.0597	ug/L	112	(70-130)		
DUP_202005060512	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0275	ug/L	121	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0278	ug/L	122	(70-130)	30	1.1
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00210	ug/L	115	(50-150)		
MS2_202004270089	Perfluorohexanesulfonic acid (PFHxS)	0.011	0.046	0.0628	ug/L	114	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)\	RPD%
DUP_202005060512	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0290	ug/L	116	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0291	ug/L	116	(70-130)	30	0.34
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00233	ug/L	116	(50-150)		
MS2_202004270089	Perfluorohexanoic acid (PFHxA)	0.0033	0.05	0.0614	ug/L	116	(70-130)		
DUP_202005060512	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0290	ug/L	116	(70-130)	30	2.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00236	ug/L	118	(50-150)		
MS2_202004270089	Perfluorononanoic acid (PFNA)	ND	0.05	0.0550	ug/L	110	(70-130)		
DUP_202005060512	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0264	ug/L	114	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0271	ug/L	117	(70-130)	30	2.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00216	ug/L	117	(50-150)		
MS2_202004270089	Perfluorooctanesulfonic acid (PFOS)	0.0040	0.046	0.0556	ug/L	111	(70-130)		
DUP_202005060512	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0289	ug/L	116	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0291	ug/L	117	(70-130)	30	0.69
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00245	ug/L	123	(50-150)		
MS2_202004270089	Perfluorooctanoic acid (PFOA)	0.013	0.05	0.0657	ug/L	106	(70-130)		
DUP_202005060512	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0290	ug/L	116	(70-130)	30	0.69
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00215	ug/L	107	(50-150)		
MS2_202004270089	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0568	ug/L	114	(70-130)		
DUP_202005060512	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0276	ug/L	110	(70-130)	30	1.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00200	ug/L	100	(50-150)		
MS2_202004270089	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0513	ug/L	103	(70-130)		
DUP_202005060512	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0282	ug/L	113	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 869571
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0281	ug/L	112	(70-130)	30	0.36
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00231	ug/L	116	(50-150)		
MS2_202004270089	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0534	ug/L	107	(70-130)		

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1247998

Analysis Date: 05/12/2020

LCS1	Alkalinity in CaCO3 units		100	98.8	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)	20	0.81
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.00	mg/L	100	(50-150)		
MS_202005060435	Alkalinity in CaCO3 units	140	100	238	mg/L	98	(80-120)		
MS_202005070119	Alkalinity in CaCO3 units	15	100	119	mg/L	104	(80-120)		
MSD_202005060435	Alkalinity in CaCO3 units	140	100	239	mg/L	99	(80-120)	20	0.56
MSD_202005070119	Alkalinity in CaCO3 units	15	100	119	mg/L	104	(80-120)	20	0.31

Total Organic Carbon by SM 5310C

Analytical Batch: 1248620

Analysis Date: 05/13/2020

LCS1	Total Organic Carbon		5	5.23	mg/L	105	(90-110)		
LCS2	Total Organic Carbon		5	5.29	mg/L	106	(90-110)	20	1.1
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.232	mg/L	116	(50-150)		
MS_202005060515	Total Organic Carbon	0.78	4	4.94	mg/L	104	(80-120)		
MS2_202005060085	Total Organic Carbon	2.3	2	4.38	mg/L	103	(80-120)		
MSD_202005060515	Total Organic Carbon	0.78	4	4.92	mg/L	104	(80-120)	20	0.41
MSD2_202005060085	Total Organic Carbon	2.3	2	4.40	mg/L	103	(80-120)	20	0.34

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 05/26/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot	E.	Tot	E.	Tot	E.

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot	E.	Tot	E.	Tot	E.

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 05/26/2020

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Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn:

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coliform	E. Coli Large	Total Coliform	E. Coliform	Total Coliform

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 05/26/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 870644
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 870644
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **May 12, 2020 at 1340**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202005120500</u>	GAC-1-20200512	05/12/2020 0925
	@537.1	
<u>202005120501</u>	GAC-2-20200512	05/12/2020 0928
	@537.1	
<u>202005120502</u>	GAC-3-20200512	05/12/2020 0931
	@537.1	
<u>202005120503</u>	GAC-4-20200512	05/12/2020 0934
	@537.1	
<u>202005120504</u>	IX-1-20200512	05/12/2020 0937
	@537.1	
<u>202005120505</u>	IX-2-20200512	05/12/2020 0940
	@537.1	
<u>202005120506</u>	IX-3-20200512	05/12/2020 0943
	@537.1	
<u>202005120507</u>	IX-4-20200512	05/12/2020 0946
	@537.1	
<u>202005120508</u>	LH-INF 20200512	05/12/2020 0949
	@537.1	
	Chloride	@ANIONS48 Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon
<u>202005120509</u>	LH-INF-DUP-20200512	05/12/2020 0950
	@537.1	
<u>202005120510</u>	GAC-5-20200512	05/12/2020 1131
	@537.1	
<u>202005120511</u>	GAC-6-20200512	05/12/2020 1134
	@537.1	
<u>202005120512</u>	GAC-7-20200512	05/12/2020 1137

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 870644
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **May 12, 2020 at 1340**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202005120513	GAC-8-20200512	05/12/2020 1140
	@537.1	
202005120514	IX-5-20200512	05/12/2020 1143
	@537.1	
202005120515	IX-6-20200512	05/12/2020 1146
	@537.1	
202005120516	IX-7-20200512	05/12/2020 1149
	@537.1	
202005120517	IX-8-20200512	05/12/2020 1152
	@537.1	
202005120518	MB-INF-20200512	05/12/2020 1155
	@537.1	
	Chloride	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon
202005120519	FB-20200512	05/12/2020 1158
	@537.1 FB	

Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0

STOLYAN

FROM: GSI Environmental Inc.
19200 Von Karman Ave, Suite 800
Irvine, CA 92612
(949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miae Jeon

GLOBAL ID:

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang

SAMPLER(S): (PRINT) RDT/BC

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

LABORATORY: Eurofins Eaton Analytical

REQUESTED ANALYSES
Please check box or fill in blank as needed.

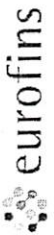
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preservation		PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME			Unpreserved	Preserved				
	GAC-1 - 20200512	5-12	09:25	Water	2	2	2	X			
	GAC-2 - 20200512		09:28	Water	2	2	2	X			
	GAC-3 - 20200512		09:31	Water	2	2	2	X			
	GAC-4 - 20200512		09:34	Water	2	2	2	X			
	IX-1 - 20200512		09:37	Water	2	2	2	X			
	IX-2 - 20200512		09:40	Water	2	2	2	X			
	IX-3 - 20200512		09:43	Water	2	2	2	X			
	IX-4 - 20200512		09:46	Water	2	2	2	X			
	LH-INF - 20200512		09:49	Water	5	2	3	X	X	X	
	LH-INF-DUP - 20200512		09:50	Water	2	2	2	X			
	GAC-5 - 20200512		11:31	Water	2	2	2	X			
	GAC-6 - 20200512		11:34	Water	2	2	2	X			
	GAC-7 - 20200512		11:37	Water	2	2	2	X			
	GAC-8 - 20200512		11:40	Water	2	2	2	X			

Relinquished by: (Signature) *[Signature]* Date: 5-12-20 Time: 1337

Relinquished by: (Signature) *[Signature]* Date: 5-12-20 Time: 13:46

Relinquished by: (Signature) *[Signature]* Date: _____ Time: _____

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT)																							
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		REQUESTED ANALYSES Please check box or fill in blank as needed.																									
LABORATORY: Eurofins Eaton Analytical		Turnaround Time: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																									
SPECIAL INSTRUCTIONS: Send report copies to pegalwin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results																											
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	Unpreserved	Preserved	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)															
		DATE	TIME																								
	IX-5 - 20200512	5-12	1143	Water	2				X																		
	IX-6 - 20200512		1146	Water	2				X																		
	IX-7 - 20200512		1149	Water	2				X																		
	IX-8 - 20200512		1152	Water	2				X																		
	MB-INF - 20200512		1155	Water	5			3	X	X	X	X															
	MB-INF-DUP			Water																							
	FB - 20200512		1158	Water	1			1				X															
Relinquished by: (Signature) <i>DEL</i>		DATE: <i>5-12-20</i>		TIME: <i>1337</i>		Received by: (Signature)		Date: <i>5-12-20</i>		Time: <i>1340</i>																	
Relinquished by: (Signature)		DATE: <i>5-12-20</i>		TIME: <i>1340</i>		Received by: (Signature)		Date: <i>5-12-20</i>		Time: <i>1340</i>																	
Relinquished by: (Signature)		DATE: <i>5-12-20</i>		TIME: <i>1340</i>		Received by: (Signature)		Date: <i>5-12-20</i>		Time: <i>1340</i>																	



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 57644M

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6301A (Observation = 8.6 °C) (Corr. Factor 0.2 °C) (Final = 8.4 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532L.CMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: [Signature] SIGNATURE

COMPANY/TITLE: Eurofins Eaton Analytical

DATE: 5-2-20

TIME: 1640

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 870644
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

N1 -LCS1 recovery for PFTA was slightly above the above method acceptance limits. LCS 2 was at 104 % recovery .LCS1/LCS2 RPD is acceptable. All other Batch QCs are acceptable. This target analyte was not detected in the sample. ND results are acceptable for compliance.

Flags Legend:

N1 - See case narrative.

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202005120508	<u>LH-INF 20200512</u>			
05/19/2020 20:27	Alkalinity in CaCO3 units		200		mg/L	2.0
05/13/2020 08:09	Chloride		100	250	mg/L	5.0
05/13/2020 08:09	Nitrate as Nitrogen by IC		2.7	10	mg/L	1.0
05/13/2020 08:09	Nitrate as NO3 (calc)		12	45	mg/L	4.4
05/15/2020 00:27	Perfluorobutanesulfonic acid (PFBS)		0.0058		ug/L	0.0020
05/15/2020 00:27	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
05/15/2020 00:27	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
05/15/2020 00:27	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
05/15/2020 00:27	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
05/15/2020 00:27	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
05/13/2020 08:09	Sulfate		170	250	mg/L	5.0
05/13/2020 08:09	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
05/26/2020 21:59	Total Organic Carbon		0.66		mg/L	0.30
		202005120509	<u>LH-INF-DUP-20200512</u>			
05/15/2020 00:46	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
05/15/2020 00:46	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
05/15/2020 00:46	Perfluorohexanoic acid (PFHxA)		0.0029		ug/L	0.0020
05/15/2020 00:46	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
05/15/2020 00:46	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
05/15/2020 00:46	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		202005120518	<u>MB-INF-20200512</u>			
05/18/2020 23:11	Alkalinity in CaCO3 units		170		mg/L	2.0
05/13/2020 07:56	Chloride		53	250	mg/L	2.5
05/13/2020 07:56	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
05/13/2020 07:56	Nitrate as NO3 (calc)		10	45	mg/L	2.2
05/15/2020 02:12	Perfluorobutanesulfonic acid (PFBS)		0.0088		ug/L	0.0020
05/15/2020 02:12	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
05/15/2020 02:12	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
05/15/2020 02:12	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
05/15/2020 02:12	Perfluorohexanoic acid (PFHxA)		0.0045		ug/L	0.0020
05/15/2020 02:12	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
05/15/2020 02:12	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
05/15/2020 02:12	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
05/13/2020 07:56	Sulfate		80	250	mg/L	2.5
05/13/2020 07:56	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
Fax: (626) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 870644
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Samples Received on:
05/12/2020 1340

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
05/26/2020 23:59	Total Organic Carbon		0.59		mg/L	0.30

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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200512 (202005120500)					Sampled on 05/12/2020 0925				
EPA 537.1 - EPA Method 537.1									
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	13C2-PFDA	80	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	13C2-PFHxA	85	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	136	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	77	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	108	%		1
05/13/20	05/14/20 23:10	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	109	%		1

GAC-2-20200512 (202005120501)					Sampled on 05/12/2020 0928				
EPA 537.1 - EPA Method 537.1									
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	13C2-PFDA	99	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	13C2-PFHxA	106	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	93	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	109	%		1
05/13/20	05/14/20 23:19	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	108	%		1

GAC-3-20200512 (202005120502)

Sampled on 05/12/2020 0931

EPA 537.1 - EPA Method 537.1

05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	13C2-PFDA	101	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	13C2-PFHxA	111	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	97	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/13/20	05/14/20 23:29	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	111	%		1

GAC-4-20200512 (202005120503)

Sampled on 05/12/2020 0934

EPA 537.1 - EPA Method 537.1

05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	13C2-PFDA	98	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	13C2-PFHxA	107	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	95	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	108	%		1
05/13/20	05/14/20 23:39	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	106	%		1

IX-1-20200512 (202005120504)

Sampled on 05/12/2020 0937

EPA 537.1 - EPA Method 537.1

05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	13C2-PFDA	105	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	13C2-PFHxA	112	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	102	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	109	%		1
05/13/20	05/14/20 23:48	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	111	%		1

IX-2-20200512 (202005120505)

Sampled on 05/12/2020 0940

EPA 537.1 - EPA Method 537.1

05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	13C2-PFDA	108	%		1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	13C2-PFHxA	114	%		1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	106	%		1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	113	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/14/20 23:58	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	110	%		1
IX-3-20200512 (202005120506)					Sampled on 05/12/2020 0943				
EPA 537.1 - EPA Method 537.1									
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	13C2-PFDA	108	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	13C2-PFHxA	113	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	105	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/13/20	05/15/20 00:07	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	112	%		1

IX-4-20200512 (202005120507)

Sampled on 05/12/2020 0946

EPA 537.1 - EPA Method 537.1

05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	13C2-PFDA	105	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	13C2-PFHxA	114	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	105	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/13/20	05/15/20 00:17	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	112	%		1

LH-INF 20200512 (202005120508)

Sampled on 05/12/2020 0949

SM 5310C - Total Organic Carbon

05/26/20 21:59	1251244	(SM 5310C)	Total Organic Carbon	0.66	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

05/13/20 08:09	1248080	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	1.0	10
05/13/20 08:09	1248080	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	4.4	10
05/13/20 08:09	1248080	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.12	10
05/13/20 08:09	1248080	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

05/13/20 08:09	1248084	(EPA 300.0)	Chloride	100	mg/L	5.0	10
05/13/20 08:09	1248084	(EPA 300.0)	Sulfate	170	mg/L	5.0	10

EPA 537.1 - EPA Method 537.1

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Tel: (626) 386-1100
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0058	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	13C2-PFDA	121	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	13C2-PFHxA	116	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	110	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/13/20	05/15/20 00:27	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	122	%		1

SM 2320B - Alkalinity in CaCO3 units

05/19/20 20:27	1249662	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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LH-INF-DUP-20200512 (202005120509)

Sampled on 05/12/2020 0950

EPA 537.1 - EPA Method 537.1

05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0029	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	13C2-PFDA	105	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	13C2-PFHxA	106	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	99	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	118	%		1
05/13/20	05/15/20 00:46	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	115	%		1

GAC-5-20200512 (202005120510)

Sampled on 05/12/2020 1131

EPA 537.1 - EPA Method 537.1

05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	13C2-PFDA	193	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	13C2-PFHxA	195	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	181	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	115	%		1
05/13/20	05/15/20 00:55	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	190	%		1

GAC-6-20200512 (202005120511)

Sampled on 05/12/2020 1134

EPA 537.1 - EPA Method 537.1

05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	13C2-PFDA	106	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	13C2-PFHxA	109	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	99	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/13/20	05/15/20 01:05	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	115	%		1

GAC-7-20200512 (202005120512)

Sampled on 05/12/2020 1137

EPA 537.1 - EPA Method 537.1

05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	13C2-PFDA	103	%		1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	13C2-PFHxA	109	%		1

Rounding on totals after summation.
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	99	%		1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/13/20	05/15/20 01:15	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	113	%		1

GAC-8-20200512 (202005120513)

Sampled on 05/12/2020 1140

EPA 537.1 - EPA Method 537.1

05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	13C2-PFDA	108	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	13C2-PFHxA	113	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	100	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/13/20	05/15/20 01:24	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	111	%		1

IX-5-20200512 (202005120514)

Sampled on 05/12/2020 1143

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	13C2-PFDA	117	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	13C2-PFHxA	110	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	106	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	114	%		1
05/13/20	05/15/20 01:34	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	117	%		1

IX-6-20200512 (202005120515)

Sampled on 05/12/2020 1146

EPA 537.1 - EPA Method 537.1									
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	13C2-PFDA	109	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	13C2-PFHxA	106	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	102	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	119	%		1
05/13/20	05/15/20 01:43	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	107	%		1

IX-7-20200512 (202005120516)

Sampled on 05/12/2020 1149

EPA 537.1 - EPA Method 537.1

05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	13C2-PFDA	99	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	13C2-PFHxA	98	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	94	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	119	%		1
05/13/20	05/15/20 01:53	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	106	%		1

IX-8-20200512 (202005120517)

Sampled on 05/12/2020 1152

EPA 537.1 - EPA Method 537.1

05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	13C2-PFDA	104	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	13C2-PFHxA	105	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	98	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	115	%		1
05/13/20	05/15/20 02:02	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	109	%		1

MB-INF-20200512 (202005120518)

Sampled on 05/12/2020 1155

SM 5310C - Total Organic Carbon

05/26/20 23:59	1251244	(SM 5310C)	Total Organic Carbon	0.59	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

05/13/20 07:56	1248080	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
05/13/20 07:56	1248080	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
05/13/20 07:56	1248080	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
05/13/20 07:56	1248080	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

05/13/20 07:56	1248084	(EPA 300.0)	Chloride	53	mg/L	2.5	5
05/13/20 07:56	1248084	(EPA 300.0)	Sulfate	80	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0088	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0045	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (N1)	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	13C2-PFDA	122	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	13C2-PFHxA	115	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	d3-NMeFOSAA	116	%		1
05/13/20	05/15/20 02:12	1248203	1248833	(EPA 537.1)	d5-NEtFOSAA	119	%		1
SM 2320B - Alkalinity in CaCO3 units									
	05/18/20 23:11		1249366	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

FB-20200512 (202005120519)

Sampled on 05/12/2020 1158

EPA 537.1 - EPA Method 537.1

05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 870644
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/12/2020 1340

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	13C2-PFDA	109	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	13C2-PFHxA	120	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	13C3-HFPO-DA	100	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	d3-NMeFOSAA	83	%		1
05/26/20	05/27/20 14:18	1250864	1251473	(EPA 537.1)	d5-NEtFOSAA	122	%		1

Rounding on totals after summation.
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1248080

202005120508 LH-INF 20200512
 202005120518 MB-INF-20200512

Analysis Date: 05/13/2020

Analyzed by: B9PD
 Analyzed by: B9PD

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1248084

202005120508 LH-INF 20200512
 202005120518 MB-INF-20200512

Analysis Date: 05/13/2020

Analyzed by: B9PD
 Analyzed by: B9PD

EPA Method 537.1

Prep Batch: 1248203 Analytical Batch: 1248833

202005120500 GAC-1-20200512
 202005120501 GAC-2-20200512
 202005120502 GAC-3-20200512
 202005120503 GAC-4-20200512
 202005120504 IX-1-20200512
 202005120505 IX-2-20200512
 202005120506 IX-3-20200512
 202005120507 IX-4-20200512
 202005120508 LH-INF 20200512
 202005120509 LH-INF-DUP-20200512
 202005120510 GAC-5-20200512
 202005120511 GAC-6-20200512
 202005120512 GAC-7-20200512
 202005120513 GAC-8-20200512
 202005120514 IX-5-20200512
 202005120515 IX-6-20200512
 202005120516 IX-7-20200512
 202005120517 IX-8-20200512
 202005120518 MB-INF-20200512

Analysis Date: 05/14/2020

Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
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 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM

Alkalinity in CaCO3 units

Analytical Batch: 1249366

202005120518 MB-INF-20200512

Analysis Date: 05/18/2020

Analyzed by: ZBZZ

Alkalinity in CaCO3 units

Analytical Batch: 1249662

202005120508 LH-INF 20200512

Analysis Date: 05/19/2020

Analyzed by: ZBZZ

Total Organic Carbon

Analytical Batch: 1251244

202005120508 LH-INF 20200512
 202005120518 MB-INF-20200512

Analysis Date: 05/26/2020

Analyzed by: ZS6I
 Analyzed by: ZS6I

EPA Method 537.1

Prep Batch: 1250864 Analytical Batch: 1251473

202005120519 FB-20200512

Analysis Date: 05/27/2020

Analyzed by: SZZ

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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1248080					Analysis Date: 05/13/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.50	mg/L	100	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.53	mg/L	101	(90-110)	20	1.2
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0553	mg/L	111	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0114	mg/L	91	(50-150)		
MS_202005120495	Nitrate as Nitrogen by IC	1.4	6.5	8.33	mg/L	111	(80-120)		
MS_202005120610	Nitrate as Nitrogen by IC	ND	6.5	6.70	mg/L	107	(80-120)		
MSD_202005120495	Nitrate as Nitrogen by IC	1.4	6.5	8.25	mg/L	109	(80-120)	20	0.97
MSD_202005120610	Nitrate as Nitrogen by IC	ND	6.5	6.72	mg/L	108	(80-120)	20	0.36
LCS1	Nitrite Nitrogen by IC		1	0.997	mg/L	100	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.00	mg/L	101	(90-110)	20	1.3
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0506	mg/L	101	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0120	mg/L	96	(50-150)		
MS_202005120495	Nitrite Nitrogen by IC	ND	2.5	2.53	mg/L	101	(80-120)		
MS_202005120610	Nitrite Nitrogen by IC	ND	2.5	2.41	mg/L	96	(80-120)		
MSD_202005120495	Nitrite Nitrogen by IC	ND	2.5	2.50	mg/L	100	(80-120)	20	1.1
MSD_202005120610	Nitrite Nitrogen by IC	ND	2.5	2.39	mg/L	96	(80-120)	20	0.75
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1248084					Analysis Date: 05/13/2020				
LCS1	Chloride		25	25.8	mg/L	103	(90-110)		
LCS2	Chloride		25	26.0	mg/L	104	(90-110)	20	0.77
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.461	mg/L	92	(50-150)		
MS_202005120495	Chloride	94	65	167	mg/L	115	(80-120)		
MS_202005120610	Chloride	230	62.5	ND	mg/L				
MSD_202005120495	Chloride	94	65	165	mg/L	112	(80-120)	20	1.0
MSD_202005120610	Chloride	230	62.5	ND	mg/L				
LCS1	Sulfate		50	51.0	mg/L	102	(90-110)		
LCS2	Sulfate		50	51.4	mg/L	103	(90-110)	20	0.78
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.991	mg/L	99	(50-150)		
MRL_W	Sulfate		0.25	0.244	mg/L	97	(50-150)		
MS_202005120495	Sulfate	100	125	243	mg/L	113	(80-120)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005120610	Sulfate	6.8	125	143	mg/L	109	(80-120)		
MSD_202005120495	Sulfate	100	125	240	mg/L	111	(80-120)	20	0.89
MSD_202005120610	Sulfate	6.8	125	144	mg/L	110	(80-120)	20	0.45

EPA Method 537.1 by EPA 537.1

Analytical Batch: 1248833

Analysis Date: 05/14/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0235	ug/L	100	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0233	ug/L	99	(70-130)	30	1.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00183	ug/L	97	(50-150)		
MS_202005110065	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00165	ug/L	87	(50-150)		
MSD_202005110065	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00180	ug/L	95	(50-150)	50	8.9
LCS1	13C2-PFDA (S)		100	118	%	118	(70-130)		
LCS2	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	95.0	%	95	(70-130)		
MS_202005110065	13C2-PFDA (S)		100	100	%	100	(70-130)		
MSD_202005110065	13C2-PFDA (S)		100	106	%	106	(70-130)		
LCS1	13C2-PFHxA (S)		100	120	%	120	(70-130)		
LCS2	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	103	%	103	(70-130)		
MS_202005110065	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MSD_202005110065	13C2-PFHxA (S)		100	114	%	114	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	94.3	%	94	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			106	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS_202005110065	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MSD_202005110065	13C2-PFOA- IS#1 (I)		100	104	%	105	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	93.9	%	94	(70-130)		
MBLK	13C3-HFPO-DA (S)			93.1	%	93	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	95.8	%	96	(70-130)		
MS_202005110065	13C3-HFPO-DA (S)		100	94.1	%	94	(70-130)		
MSD_202005110065	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C4-PFOS- IS#2 (I)			107	%	107	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.5	%	99	(50-150)		
MS_202005110065	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MSD_202005110065	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0282	ug/L	119	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0249	ug/L	105	(70-130)	30	12
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00211	ug/L	112	(50-150)		
MS_202005110065	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00200	ug/L	106	(50-150)		
MSD_202005110065	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00203	ug/L	107	(50-150)	50	1.3
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0272	ug/L	117	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0254	ug/L	109	(70-130)	30	6.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00211	ug/L	113	(50-150)		
MS_202005110065	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00184	ug/L	99	(50-150)		
MSD_202005110065	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00200	ug/L	107	(50-150)	50	8.2
LCS1	d3-NMeFOSAA (I)		100	122	%	122	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MBLK	d3-NMeFOSAA (I)			106	%	106	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MS_202005110065	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MSD_202005110065	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
MBLK	d5-NEtFOSAA (S)			99.3	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	102	%	103	(70-130)		
MS_202005110065	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
MSD_202005110065	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0231	ug/L	92	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0214	ug/L	86	(70-130)	30	7.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00173	ug/L	86	(50-150)		
MS_202005110065	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00169	ug/L	84	(50-150)		
MSD_202005110065	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00176	ug/L	88	(50-150)	50	4.2
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0271	ug/L	108	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0262	ug/L	105	(70-130)	30	3.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 870644
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 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005110065	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00238	ug/L	117	(50-150)		
MSD_202005110065	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00228	ug/L	112	(50-150)	50	4.3
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0269	ug/L	108	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	106	(70-130)	30	2.3
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00230	ug/L	115	(50-150)		
MS_202005110065	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00224	ug/L	110	(50-150)		
MSD_202005110065	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00221	ug/L	109	(50-150)	50	1.5
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0267	ug/L	120	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0253	ug/L	115	(70-130)	30	6.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00210	ug/L	119	(50-150)		
MS_202005110065	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00220	ug/L	123	(50-150)		
MSD_202005110065	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00201	ug/L	112	(50-150)	50	8.9
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0254	ug/L	102	(70-130)	30	13
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202005110065	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00211	ug/L	104	(50-150)		
MSD_202005110065	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00220	ug/L	108	(50-150)	50	4.0
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0233	ug/L	93	(70-130)	30	18
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00199	ug/L	100	(50-150)		
MS_202005110065	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00196	ug/L	97	(50-150)		
MSD_202005110065	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00195	ug/L	97	(50-150)	50	0.47
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0309	ug/L	124	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0276	ug/L	110	(70-130)	30	12
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00253	ug/L	126	(50-150)		
MS_202005110065	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00232	ug/L	115	(50-150)		
MSD_202005110065	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00231	ug/L	114	(50-150)	50	0.52
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0249	ug/L	109	(70-130)	30	0.40
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00206	ug/L	113	(50-150)		
MS_202005110065	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00197	ug/L	108	(50-150)		
MSD_202005110065	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00201	ug/L	110	(50-150)	50	1.8

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0304	ug/L	121	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0266	ug/L	106	(70-130)	30	12
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00249	ug/L	125	(50-150)		
MS_202005110065	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00230	ug/L	112	(50-150)		
MSD_202005110065	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00236	ug/L	115	(50-150)	50	2.7
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0302	ug/L	121	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0263	ug/L	105	(70-130)	30	13
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00229	ug/L	115	(50-150)		
MS_202005110065	Perfluorononanoic acid (PFNA)	ND	0.002	0.00225	ug/L	112	(50-150)		
MSD_202005110065	Perfluorononanoic acid (PFNA)	ND	0.002	0.00221	ug/L	110	(50-150)	50	2.0
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0243	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0256	ug/L	110	(70-130)	30	6.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00223	ug/L	121	(50-150)		
MS_202005110065	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00209	ug/L	109	(50-150)		
MSD_202005110065	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00210	ug/L	110	(50-150)	50	0.53
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0296	ug/L	119	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0276	ug/L	111	(70-130)	30	8.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00245	ug/L	122	(50-150)		
MS_202005110065	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00242	ug/L	116	(50-150)		
MSD_202005110065	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00241	ug/L	115	(50-150)	50	0.56
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0340	ug/L	136	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0259	ug/L	104	(70-130)	30	27
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00205	ug/L	102	(50-150)		
MS_202005110065	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00205	ug/L	101	(50-150)		
MSD_202005110065	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00208	ug/L	103	(50-150)	50	1.5
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0308	ug/L	123	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0253	ug/L	101	(70-130)	30	20
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00196	ug/L	98	(50-150)		
MS_202005110065	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00197	ug/L	97	(50-150)		
MSD_202005110065	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00206	ug/L	102	(50-150)	50	4.6
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0284	ug/L	114	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0257	ug/L	103	(70-130)	30	8.6

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00221	ug/L	111	(50-150)		
MS_202005110065	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00212	ug/L	105	(50-150)		
MSD_202005110065	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00216	ug/L	107	(50-150)	50	1.8

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1249366

Analysis Date: 05/18/2020

LCS1	Alkalinity in CaCO3 units		100	99.2	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.3	mg/L	99	(90-110)	20	0.10
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.87	mg/L	94	(50-150)		
MS_202005110623	Alkalinity in CaCO3 units	230	100	233	mg/L	<u>0.120</u>	(80-120)		
MS_202005120352	Alkalinity in CaCO3 units	180	100	228	mg/L	<u>42</u>	(80-120)		
MSD_202005110623	Alkalinity in CaCO3 units	230	100	230	mg/L	<u>-2.17</u>	(80-120)	20	0.81
MSD_202005120352	Alkalinity in CaCO3 units	180	100	226	mg/L	<u>41</u>	(80-120)	20	0.75

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1249662

Analysis Date: 05/19/2020

LCS1	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)	20	0.0
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.04	mg/L	102	(50-150)		
MS_202004270298	Alkalinity in CaCO3 units	240	100	328	mg/L	89	(80-120)		
MSD_202004270298	Alkalinity in CaCO3 units	240	100	333	mg/L	94	(80-120)	20	1.5

EPA Method 537.1 by EPA 537.1

Prep Batch: 1249488 Analytical Batch: 1250481

Analysis Date: 05/21/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0471	ND	ug/L				
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0471	ND	ug/L				
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.00188	ND	ug/L				
MS1_202005150020	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.02355	ND	ug/L				
MSD1_202005150020	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.02355	ND	ug/L				
LCS3	13C2-PFDA (S)		100	ND	%				
LCS4	13C2-PFDA (S)		100	ND	%				
MBLK	13C2-PFDA (S)			<130	%				
MRL_CHK	13C2-PFDA (S)		100	ND	%				
MS1_202005150020	13C2-PFDA (S)		100	ND	%				
MSD1_202005150020	13C2-PFDA (S)		100	ND	%				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	13C2-PFHxA (S)		100	ND	%				
LCS4	13C2-PFHxA (S)		100	ND	%				
MBLK	13C2-PFHxA (S)			<130	%				
MRL_CHK	13C2-PFHxA (S)		100	ND	%				
MS1_202005150020	13C2-PFHxA (S)		100	ND	%				
MSD1_202005150020	13C2-PFHxA (S)		100	ND	%				
LCS3	13C2-PFOA- IS#1 (I)		100	ND	%				
LCS4	13C2-PFOA- IS#1 (I)		100	ND	%				
MBLK	13C2-PFOA- IS#1 (I)			<150	%				
MRL_CHK	13C2-PFOA- IS#1 (I)		100	ND	%				
MS1_202005150020	13C2-PFOA- IS#1 (I)		100	ND	%				
MSD1_202005150020	13C2-PFOA- IS#1 (I)		100	ND	%				
LCS3	13C3-HFPO-DA (S)		100	ND	%				
LCS4	13C3-HFPO-DA (S)		100	ND	%				
MBLK	13C3-HFPO-DA (S)			<130	%				
MRL_CHK	13C3-HFPO-DA (S)		100	ND	%				
MS1_202005150020	13C3-HFPO-DA (S)		100	ND	%				
MSD1_202005150020	13C3-HFPO-DA (S)		100	ND	%				
LCS3	13C4-PFOS- IS#2 (I)		100	ND	%				
LCS4	13C4-PFOS- IS#2 (I)		100	ND	%				
MBLK	13C4-PFOS- IS#2 (I)			<150	%				
MRL_CHK	13C4-PFOS- IS#2 (I)		100	ND	%				
MS1_202005150020	13C4-PFOS- IS#2 (I)		100	ND	%				
MSD1_202005150020	13C4-PFOS- IS#2 (I)		100	ND	%				
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0485	ND	ug/L				
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0485	ND	ug/L				
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.00189	ND	ug/L				
MS1_202005150020	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.023625	ND	ug/L				
MSD1_202005150020	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.023625	ND	ug/L				
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0466	ND	ug/L				
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0466	ND	ug/L				
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.00186	ND	ug/L				
MS1_202005150020	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0233	ND	ug/L				
MSD1_202005150020	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0233	ND	ug/L				
LCS3	d3-NMeFOSAA (I)		100	ND	%				
LCS4	d3-NMeFOSAA (I)		100	ND	%				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	d3-NMeFOSAA (I)			<150	%				
MRL_CHK	d3-NMeFOSAA (I)		100	ND	%				
MS1_202005150020	d3-NMeFOSAA (I)		100	ND	%				
MSD1_202005150020	d3-NMeFOSAA (I)		100	ND	%				
LCS3	d5-NEtFOSAA (S)		100	ND	%				
LCS4	d5-NEtFOSAA (S)		100	ND	%				
MBLK	d5-NEtFOSAA (S)			<130	%				
MRL_CHK	d5-NEtFOSAA (S)		100	ND	%				
MS1_202005150020	d5-NEtFOSAA (S)		100	ND	%				
MSD1_202005150020	d5-NEtFOSAA (S)		100	ND	%				
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	ND	ug/L				
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	ND	ug/L				
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	ND	ug/L				
MS1_202005150020	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	ND	ug/L				
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	ND	ug/L				
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	ND	ug/L				
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MS1_202005150020	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	ND	ug/L				
MSD1_202005150020	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	ND	ug/L				
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	ND	ug/L				
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	ND	ug/L				
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	ND	ug/L				
MS1_202005150020	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	ND	ug/L				
MSD1_202005150020	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	ND	ug/L				
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.04426	ND	ug/L				
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.04426	ND	ug/L				
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.00177	ND	ug/L				
MS1_202005150020	Perfluorobutanesulfonic acid (PFBS)	ND	0.02213	ND	ug/L				
MSD1_202005150020	Perfluorobutanesulfonic acid (PFBS)	ND	0.02213	ND	ug/L				
LCS3	Perfluorodecanoic acid (PFDA)		0.05	ND	ug/L				
LCS4	Perfluorodecanoic acid (PFDA)		0.05	ND	ug/L				
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorodecanoic acid (PFDA)	ND	0.025	ND	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202005150020	Perfluorodecanoic acid (PFDA)	ND	0.025	ND	ug/L				
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	ND	ug/L				
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	ND	ug/L				
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorododecanoic acid (PFDoA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorododecanoic acid (PFDoA)	ND	0.025	ND	ug/L				
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	ND	ug/L				
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	ND	ug/L				
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	ND	ug/L				
MS1_202005150020	Perfluoroheptanoic acid (PFHpA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluoroheptanoic acid (PFHpA)	ND	0.025	ND	ug/L				
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.0456	ND	ug/L				
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.0456	ND	ug/L				
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.001824	ND	ug/L				
MS1_202005150020	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0228	ND	ug/L				
MSD1_202005150020	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0228	ND	ug/L				
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	ND	ug/L				
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	ND	ug/L				
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorohexanoic acid (PFHxA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorohexanoic acid (PFHxA)	ND	0.025	ND	ug/L				
LCS3	Perfluorononanoic acid (PFNA)		0.05	ND	ug/L				
LCS4	Perfluorononanoic acid (PFNA)		0.05	ND	ug/L				
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorononanoic acid (PFNA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorononanoic acid (PFNA)	ND	0.025	ND	ug/L				
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.04628	ND	ug/L				
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.04628	ND	ug/L				
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.001851	ND	ug/L				
MS1_202005150020	Perfluorooctanesulfonic acid (PFOS)	ND	0.02314	ND	ug/L				
MSD1_202005150020	Perfluorooctanesulfonic acid (PFOS)	ND	0.02314	ND	ug/L				
LCS3	Perfluorooctanoic acid (PFOA)		0.05	ND	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorooctanoic acid (PFOA)		0.05	ND	ug/L				
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorooctanoic acid (PFOA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorooctanoic acid (PFOA)	ND	0.025	ND	ug/L				
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	ND	ug/L				
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	ND	ug/L				
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorotetradecanoic acid (PFTA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorotetradecanoic acid (PFTA)	ND	0.025	ND	ug/L				
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	ND	ug/L				
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	ND	ug/L				
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	ND	ug/L				
MS1_202005150020	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	ND	ug/L				
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	ND	ug/L				
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	ND	ug/L				
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	ND	ug/L				
MS1_202005150020	Perfluoroundecanoic acid (PFUnA)	ND	0.025	ND	ug/L				
MSD1_202005150020	Perfluoroundecanoic acid (PFUnA)	ND	0.025	ND	ug/L				

Total Organic Carbon by SM 5310C

Analytical Batch: 1251244

Analysis Date: 05/26/2020

LCS1	Total Organic Carbon		5	4.84	mg/L	97	(90-110)		
LCS2	Total Organic Carbon		5	5.08	mg/L	102	(90-110)	20	4.8
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.239	mg/L	119	(50-150)		
MS_202005150238	Total Organic Carbon	2.3	4	6.20	mg/L	97	(80-120)		
MS2_202005150240	Total Organic Carbon	3.1	2	5.22	mg/L	105	(80-120)		
MSD_202005150238	Total Organic Carbon	2.3	4	6.26	mg/L	99	(80-120)	20	1.2
MSD2_202005150240	Total Organic Carbon	3.1	2	5.10	mg/L	99	(80-120)	20	2.3

EPA Method 537.1 by EPA 537.1

Prep Batch: 1250864 Analytical Batch: 1251473

Analysis Date: 05/27/2020

DUP_202005230042	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0227	ug/L	96	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 870644
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0224	ug/L	95	(70-130)	30	1.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00173	ug/L	92	(50-150)		
MS_202005230040	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00159	ug/L	84	(50-150)		
DUP_202005230042	13C2-PFDA (S)			124	%	124	(70-130)		
LCS1	13C2-PFDA (S)		100	122	%	123	(70-130)		
LCS2	13C2-PFDA (S)		100	120	%	120	(70-130)		
MBLK	13C2-PFDA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	110	%	110	(70-130)		
MS_202005230040	13C2-PFDA (S)		100	117	%	117	(70-130)		
DUP_202005230042	13C2-PFHxA (S)			71.7	%	72	(70-130)		
LCS1	13C2-PFHxA (S)		100	121	%	121	(70-130)		
LCS2	13C2-PFHxA (S)		100	122	%	122	(70-130)		
MBLK	13C2-PFHxA (S)			125	%	125	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MS_202005230040	13C2-PFHxA (S)		100	125	%	125	(70-130)		
DUP_202005230042	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			112	%	112	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	115	%	115	(50-150)		
MS_202005230040	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
DUP_202005230042	13C3-HFPO-DA (S)			78.3	%	78	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
MBLK	13C3-HFPO-DA (S)			115	%	115	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	98.7	%	99	(70-130)		
MS_202005230040	13C3-HFPO-DA (S)		100	118	%	118	(70-130)		
DUP_202005230042	13C4-PFOS- IS#2 (I)			109	%	109	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			108	%	108	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
MS_202005230040	13C4-PFOS- IS#2 (I)		100	109	%	109	(50-150)		
DUP_202005230042	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0246	ug/L	104	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0259	ug/L	109	(70-130)	30	5.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00213	ug/L	113	(50-150)		
MS_202005230040	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00220	ug/L	116	(50-150)		
DUP_202005230042	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0250	ug/L	107	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0248	ug/L	106	(70-130)	30	0.80
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00201	ug/L	108	(50-150)		
MS_202005230040	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00179	ug/L	96	(50-150)		
DUP_202005230042	d3-NMeFOSAA (I)			108	%	108	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MBLK	d3-NMeFOSAA (I)			105	%	105	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS_202005230040	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
DUP_202005230042	d5-NEtFOSAA (S)			103	%	103	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
MBLK	d5-NEtFOSAA (S)			119	%	119	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
MS_202005230040	d5-NEtFOSAA (S)		100	116	%	116	(70-130)		
DUP_202005230042	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0213	ug/L	85	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0225	ug/L	90	(70-130)	30	5.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00185	ug/L	93	(50-150)		
MS_202005230040	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00206	ug/L	103	(50-150)		
DUP_202005230042	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00241	ug/L	121	(50-150)		
MS_202005230040	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00234	ug/L	115	(50-150)		
DUP_202005230042	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0283	ug/L	113	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0281	ug/L	112	(70-130)	30	0.71
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00243	ug/L	121	(50-150)		
MS_202005230040	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00233	ug/L	114	(50-150)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 870644
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202005230042	Perfluorobutanesulfonic acid (PFBS)	0.062		0.0570	ug/L		(0-30)	30	9.0
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0252	ug/L	114	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0249	ug/L	113	(70-130)	30	1.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00211	ug/L	119	(50-150)		
MS_202005230040	Perfluorobutanesulfonic acid (PFBS)	0.011	0.0018	0.0131	ug/L	130	(50-150)		
DUP_202005230042	Perfluorodecanoic acid (PFDA)	0.0049		0.00655	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0275	ug/L	110	(70-130)	30	2.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00225	ug/L	113	(50-150)		
MS_202005230040	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00237	ug/L	115	(50-150)		
DUP_202005230042	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0256	ug/L	102	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0260	ug/L	104	(70-130)	30	1.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00199	ug/L	99	(50-150)		
MS_202005230040	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00209	ug/L	103	(50-150)		
DUP_202005230042	Perfluoroheptanoic acid (PFHpA)	0.10		0.0973	ug/L		(0-30)	30	2.7
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0293	ug/L	117	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0289	ug/L	116	(70-130)	30	1.4
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00256	ug/L	128	(50-150)		
MS_202005230040	Perfluoroheptanoic acid (PFHpA)	0.014	0.002	0.0167	ug/L	158	(50-150)		
DUP_202005230042	Perfluorohexanesulfonic acid (PFHxS)	0.095		0.107	ug/L		(0-30)	30	16
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0271	ug/L	119	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0263	ug/L	115	(70-130)	30	3.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00215	ug/L	118	(50-150)		
MS_202005230040	Perfluorohexanesulfonic acid (PFHxS)	0.0079	0.0018	0.00998	ug/L	113	(50-150)		
DUP_202005230042	Perfluorohexanoic acid (PFHxA)	0.17		0.121	ug/L		(0-30)	30	16
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0295	ug/L	118	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0289	ug/L	116	(70-130)	30	2.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00243	ug/L	122	(50-150)		
MS_202005230040	Perfluorohexanoic acid (PFHxA)	0.020	0.002	0.0227	ug/L	130	(50-150)		
DUP_202005230042	Perfluorononanoic acid (PFNA)	0.0078		0.0108	ug/L		(0-30)	30	32
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0281	ug/L	112	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0284	ug/L	114	(70-130)	30	1.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	116	(50-150)		
MS_202005230040	Perfluorononanoic acid (PFNA)	ND	0.002	0.00275	ug/L	118	(50-150)		
DUP_202005230042	Perfluorooctanesulfonic acid (PFOS)	0.23		0.334	ug/L		(0-30)	30	<u>33</u>
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0259	ug/L	112	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0259	ug/L	112	(70-130)	30	0.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00214	ug/L	115	(50-150)		
MS_202005230040	Perfluorooctanesulfonic acid (PFOS)	0.016	0.0019	0.0186	ug/L	119	(50-150)		
DUP_202005230042	Perfluorooctanoic acid (PFOA)	0.28		0.363	ug/L		(0-30)	30	25
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0290	ug/L	116	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0285	ug/L	114	(70-130)	30	1.7
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00240	ug/L	120	(50-150)		
MS_202005230040	Perfluorooctanoic acid (PFOA)	0.039	0.002	0.0421	ug/L	<u>162</u>	(50-150)		
DUP_202005230042	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0273	ug/L	109	(70-130)	30	1.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202005230040	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00206	ug/L	101	(50-150)		
DUP_202005230042	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0253	ug/L	101	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0256	ug/L	103	(70-130)	30	1.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	102	(50-150)		
MS_202005230040	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00202	ug/L	99	(50-150)		
DUP_202005230042	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0277	ug/L	111	(70-130)	30	5.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00221	ug/L	111	(50-150)		
MS_202005230040	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00218	ug/L	107	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 05/31/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Report of Analysis by 24-Hour Collert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)* (Tot, E., Coli)

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 05/31/2020

Tel Fax

Report of Analysis by 18-Hour Collilert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 05/31/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 871876
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report,

Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* **NELAP/TNI Recognized Accreditation Bodies**

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 871876
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **May 19, 2020 at 1405**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202005190374	GAC-1-20200519 Static ID: 537.1 @537.1	05/19/2020 1052
202005190375	GAC-2-20200519 Static ID: 537.1 @537.1	05/19/2020 1055
202005190376	GAC-3-20200519 Static ID: 537.1 @537.1	05/19/2020 1058
202005190377	GAC-4-20200519 Static ID: 537.1 @537.1	05/19/2020 1101
202005190378	IX-1-20200519 Static ID: 537.1 @537.1	05/19/2020 1104
202005190379	IX-2-20200519 Static ID: 537.1 @537.1	05/19/2020 1107
202005190380	IX-3-20200519 Static ID: 537.1 @537.1	05/19/2020 1110
202005190381	IX-4-20200519 @537.1	05/19/2020 1113
202005190382	LH-INF-20200519 @537.1 Chloride	05/19/2020 1116
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
202005190383	GAC-5-20200519 @537.1	05/19/2020 1252
202005190384	GAC-6-20200519 @537.1	05/19/2020 1255
202005190385	GAC-7-20200519	05/19/2020 1258

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 871876
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **May 19, 2020 at 1405**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202005190386	GAC-8-20200519	05/19/2020 1301
	@537.1	
202005190387	IX-5-20200519	05/19/2020 1304
	@537.1	
202005190388	IX-6-20200519	05/19/2020 1307
	@537.1	
202005190389	IX-7-20200519	05/19/2020 1310
	@537.1	
202005190390	IX-8-20200519	05/19/2020 1313
	@537.1	
202005190391	MB-INF-20200519	05/19/2020 1316
	@537.1	
	Chloride	@ANIONS48
		Sulfate
		Alkalinity in CaCO3 units
		Total Organic Carbon
202005190392	FB-20200519	05/19/2020 1320
	@537.1 FB	

Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0

871876

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302								
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		LAB CONTACT: Sophia Liang								
LABORATORY: Eurofins Eaton Analytical		GLOBAL ID:		SAMPLER(S): (PRINT) <u>RDT</u>								
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.										
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rrtorres@gsi-net.com. Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	Unpreserved	Preserved	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1 - 20200519	5-19	1052	Water	2			X	X			
	GAC-2 - 20200519		1055	Water	2		X	X	X			
	GAC-3 - 20200519		1058	Water	2		X	X	X			
	GAC-4 - 20200519		1101	Water	2		X	X	X			
	IX-1 - 20200519		1104	Water	2		X	X	X			
	IX-2 - 20200519		1107	Water	2		X	X	X			
	IX-3 - 20200519		1110	Water	2		X	X	X			
	IX-4 - 20200519		1113	Water	2		X	X	X			
	LH-INF - 20200519		1116	Water	5		X	X	X			
	LH-INF-DUP			Water								
	GAC-5 - 20200519	5-19	1252	Water	2		X	X	X			
	GAC-6 - 20200519		1255	Water	2		X	X	X			
	GAC-7 - 20200519		1258	Water	2		X	X	X			
	GAC-8 - 20200519		1301	Water	2		X	X	X			
Relinquished by: (Signature) <u>RDT Torres</u>		Received by: (Signature) <u>Sophia Liang</u>		Date: <u>5-19</u>		Time: <u>1405</u>						
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:						
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:						

<p>FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070</p> <p>TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com</p> <p>LABORATORY: Eurofins Eaton Analytical</p>	<p>PROJECT NAME: WRD Pilot</p> <p>PROJECT CONTACT: Miae Jeon</p> <p>GLOBAL ID:</p>	<p>PROJECT NO.: 5302</p> <p>LAB CONTACT: Sophia Liang</p> <p>SAMPLER(S): (PRINT) RDT</p>																																																																																																																									
<p>REQUESTED ANALYSES Please check box or fill in blank as needed.</p>																																																																																																																											
<p>TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD</p> <p>SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">LAB USE ONLY</th> <th rowspan="2">SAMPLE ID</th> <th colspan="2">SAMPLING</th> <th rowspan="2">MATRIX</th> <th rowspan="2">NO. OF CONT.</th> <th rowspan="2">Field Filtered</th> <th rowspan="2">Preserved</th> <th rowspan="2">Unpreserved</th> <th rowspan="2">PFAS - full list (EPA 537.1)</th> <th rowspan="2">Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)</th> <th rowspan="2">Alkalinity (as CaCO3), (SM 2320B)</th> <th rowspan="2">TOC (SM 5310C)</th> <th rowspan="2">HOLD</th> </tr> <tr> <th>DATE</th> <th>TIME</th> </tr> </thead> <tbody> <tr> <td></td> <td>IX-5-20200519</td> <td>5-19</td> <td>1304</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-6-20200519</td> <td></td> <td>1307</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-7-20200519</td> <td></td> <td>1310</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-8-20200519</td> <td></td> <td>1313</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>MB-INF-20200519</td> <td></td> <td>1316</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>MB-INF-DUP</td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>FB-20200519</td> <td>5-19</td> <td>1320</td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	Preserved	Unpreserved	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	HOLD	DATE	TIME		IX-5-20200519	5-19	1304	Water					X							IX-6-20200519		1307	Water					X							IX-7-20200519		1310	Water					X							IX-8-20200519		1313	Water					X							MB-INF-20200519		1316	Water					X							MB-INF-DUP			Water												FB-20200519	5-19	1320	Water					X					
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Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (666) 988-3757

Created Date & Time: 4/30/2020 1:05:49PM

Note: Sampler Please return this paper with your samples

Kit #: 262925

Created By: Sophia F Liang - [SFL]
Deliver By: 05/11/2020

STG: Bottle Orders
Ice Type: G
Pre Registered

Client ID: WRD

Project Code: 0250000 Bottle Orders
Group Name: WRD Pilot [Set #2]
PO#/JOB#:

Description: WRD Pilot Set #2
Shipping Method: Pickup by client

Ship Sample Kits to
GSI Environmental Inc.
Attn: Robert Torres
Phone: 951-616-8406

Send Report to
Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attn: Joseph Liles
Phone: 562-275-4226

Billing Address
Water Replenishment District
Attn: Eurofins Calscience
Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712
Attn: Brian Partington
Phone: 562-275-4249
Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
4	Total Organic Carbon	4	UN1830
4	@ANIONS48, Chloride, Sulfate	4	
4	Alkalinity in CaCO3 units	4	
40	@537.1	80	
2	@537.1 TB	2	
2	@537.1 FB	2	
Sum Tests: 56		Sum Bottles: 96	

Comments

SHIPPING:
- CLIENT P/U TUESDAY, MAY 12TH @ 1PM
- PACKAGE IN 4 COOLERS

GSI SAMPLER:
- PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES.
- NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP.

ASM:
•Please also send invoices to Miae Jeon (mjeon@gsi-net.com)
•Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pgalvin@gsi-net.com, and rdtorres@gsi-net.com.

Code Status Date Shipped Via Tracking # # of Coolers Prepared By



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: SASB6

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6491 Observation = 4.9 °C (Corr. Factor = 0.3) (Final = 4.6) °C

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: Walk-In

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, international clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: <u>Yaver</u>	PRINT NAME: <u>Paul Mills</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>5-19-20</u>	TIME: <u>1405</u>
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Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 871876
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

GAC-1-20200519 &MB-INF-20200519

Unfortunately when analyzing these two samples for EPA 537.1, the original extraction and re-extraction both had surrogate failures in the samples and batch QCs rendering the data invalid for compliance. Since there are only two bottles for each sample, we don't have any remaining back up bottles to re-extract a third time. The data will be flagged for surrogate failures.

Flags Legend:

S4 - Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.

S7 - Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.

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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202005190374 <u>GAC-1-20200519</u>						
05/28/2020 16:26	Perfluorooctanesulfonic acid (PFOS)		0.0024		ug/L	0.0020
202005190382 <u>LH-INF-20200519</u>						
05/22/2020 23:44	Alkalinity in CaCO3 units		200		mg/L	2.0
05/19/2020 20:35	Chloride		110	250	mg/L	2.5
05/19/2020 20:35	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
05/19/2020 20:35	Nitrate as NO3 (calc)		12	45	mg/L	2.2
05/28/2020 17:54	Perfluorobutanesulfonic acid (PFBS)		0.0063		ug/L	0.0020
05/28/2020 17:54	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
05/28/2020 17:54	Perfluorohexanoic acid (PFHxA)		0.0029		ug/L	0.0020
05/28/2020 17:54	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
05/28/2020 17:54	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
05/28/2020 17:54	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
05/19/2020 20:35	Sulfate		180	250	mg/L	2.5
05/19/2020 20:35	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
05/28/2020 13:13	Total Organic Carbon		0.63		mg/L	0.30
202005190391 <u>MB-INF-20200519</u>						
05/22/2020 23:52	Alkalinity in CaCO3 units		170		mg/L	2.0
05/19/2020 20:22	Chloride		56	250	mg/L	2.5
05/19/2020 20:22	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
05/19/2020 20:22	Nitrate as NO3 (calc)		11	45	mg/L	2.2
05/28/2020 19:21	Perfluorobutanesulfonic acid (PFBS)		0.0036		ug/L	0.0020
05/28/2020 19:21	Perfluorohexanesulfonic acid (PFHxS)		0.0025		ug/L	0.0020
05/28/2020 19:21	Perfluorooctanesulfonic acid (PFOS)		0.013		ug/L	0.0020
05/28/2020 19:21	Perfluorooctanoic acid (PFOA)		0.0059		ug/L	0.0020
05/19/2020 20:22	Sulfate		84	250	mg/L	2.5
05/19/2020 20:22	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
05/28/2020 13:31	Total Organic Carbon		0.71		mg/L	0.30

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200519 (202005190374)					Sampled on 05/19/2020 1052				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND (S4)	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND (S4)	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0024	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	13C2-PFDA	131 (S4)	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	13C2-PFHxA	133 (S4)	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	125	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/28/20 16:26	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	128	%		1

GAC-2-20200519 (202005190375)					Sampled on 05/19/2020 1055				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	13C2-PFDA	124	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	13C2-PFHxA	124	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	118	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/28/20 16:36	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	118	%		1

GAC-3-20200519 (202005190376)

Sampled on 05/19/2020 1058

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	13C2-PFHxA	116	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/28/20 16:46	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	108	%		1

GAC-4-20200519 (202005190377)

Sampled on 05/19/2020 1101

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	13C2-PFDA	117	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	13C2-PFHxA	120	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	112	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/28/20 16:55	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	116	%		1

IX-1-20200519 (202005190378)

Static ID: 537.1

Sampled on 05/19/2020 1104

EPA 537.1 - EPA Method 537.1

05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	13C2-PFHxA	122	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	115	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/28/20 17:05	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	113	%		1

IX-2-20200519 (202005190379)

Sampled on 05/19/2020 1107

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	13C2-PFHxA	118	%		1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	112	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 17:14	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	112	%		1
IX-3-20200519 (202005190380)						Sampled on 05/19/2020 1110			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	13C2-PFDA	120	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	13C2-PFHxA	122	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	114	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/27/20	05/28/20 17:24	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	116	%		1

IX-4-20200519 (202005190381)						Sampled on 05/19/2020 1113			
EPA 537.1 - EPA Method 537.1									
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	13C2-PFDA	112	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	13C2-PFHxA	120	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	116	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/27/20	05/28/20 17:33	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	113	%		1

LH-INF-20200519 (202005190382)

Sampled on 05/19/2020 1116

SM 5310C - Total Organic Carbon

05/28/20 13:13	1251525	(SM 5310C)	Total Organic Carbon	0.63	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

05/19/20 20:35	1249655	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
05/19/20 20:35	1249655	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
05/19/20 20:35	1249655	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
05/19/20 20:35	1249655	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

05/19/20 20:35	1249657	(EPA 300.0)	Chloride	110	mg/L	2.5	5
05/19/20 20:35	1249657	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0063	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0029	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	13C2-PFHxA	111	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	102	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	121	%		1
05/27/20	05/28/20 17:54	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	113	%		1

SM 2320B - Alkalinity in CaCO3 units

05/22/20 23:44	1250460	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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GAC-5-20200519 (202005190383)

Sampled on 05/19/2020 1252

EPA 537.1 - EPA Method 537.1

05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	13C2-PFHxA	115	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/27/20	05/28/20 18:05	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	111	%		1

GAC-6-20200519 (202005190384)

Sampled on 05/19/2020 1255

EPA 537.1 - EPA Method 537.1

05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	13C2-PFDA	110	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	13C2-PFHxA	116	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/27/20	05/28/20 18:14	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	110	%		1

GAC-7-20200519 (202005190385)

Sampled on 05/19/2020 1258

EPA 537.1 - EPA Method 537.1

05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

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Report: 871876
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Water Replenishment District
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 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	13C2-PFDA	119	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	13C2-PFHxA	118	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	114	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/27/20	05/28/20 18:24	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	112	%		1

GAC-8-20200519 (202005190386)

Sampled on 05/19/2020 1301

EPA 537.1 - EPA Method 537.1

05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	13C2-PFDA	111	%		1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	13C2-PFHxA	116	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	106	%		1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	114	%		1
05/27/20	05/28/20 18:33	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	106	%		1

IX-5-20200519 (202005190387)

Sampled on 05/19/2020 1304

EPA 537.1 - EPA Method 537.1

05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	13C2-PFDA	117	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	13C2-PFHxA	120	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	113	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	117	%		1
05/27/20	05/28/20 18:43	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	109	%		1

IX-6-20200519 (202005190388)

Sampled on 05/19/2020 1307

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	13C2-PFDA	122	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	13C2-PFHxA	124	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	114	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	115	%		1
05/27/20	05/28/20 18:52	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	113	%		1

IX-7-20200519 (202005190389)

Sampled on 05/19/2020 1310

EPA 537.1 - EPA Method 537.1									
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	13C2-PFHxA	118	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	119	%		1
05/27/20	05/28/20 19:02	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	107	%		1

IX-8-20200519 (202005190390)

Sampled on 05/19/2020 1313

EPA 537.1 - EPA Method 537.1

05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	13C2-PFHxA	121	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	116	%		1
05/27/20	05/28/20 19:12	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	108	%		1

MB-INF-20200519 (202005190391)

Sampled on 05/19/2020 1316

SM 5310C - Total Organic Carbon

05/28/20 13:31	1251525	(SM 5310C)	Total Organic Carbon	0.71	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

05/19/20 20:22	1249655	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
05/19/20 20:22	1249655	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
05/19/20 20:22	1249655	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
05/19/20 20:22	1249655	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

05/19/20 20:22	1249657	(EPA 300.0)	Chloride	56	mg/L	2.5	5
05/19/20 20:22	1249657	(EPA 300.0)	Sulfate	84	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND (S7)	ug/L	0.0050	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND (S7)	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0036	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND (S7)	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0025	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND (S7)	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.013	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0059	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	13C2-PFDA	47 (S7)	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	13C2-PFHxA	50 (S7)	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	13C3-HFPO-DA	46 (S7)	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/27/20	05/28/20 19:21	1251017	1251781	(EPA 537.1)	d5-NEtFOSAA	42 (S7)	%		1

SM 2320B - Alkalinity in CaCO3 units

05/22/20 23:52	1250460	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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FB-20200519 (202005190392)

Sampled on 05/19/2020 1320

EPA 537.1 - EPA Method 537.1

05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/19/2020 1405

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	13C2-PFDA	112	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	13C2-PFHxA	123	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	13C3-HFPO-DA	107	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	d3-NMeFOSAA	93	%		1
05/29/20	06/01/20 12:37	1251841	1252352	(EPA 537.1)	d5-NEtFOSAA	118	%		1

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Report: 871876
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1249655

202005190382 LH-INF-20200519
 202005190391 MB-INF-20200519

Analysis Date: 05/19/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1249657

202005190382 LH-INF-20200519
 202005190391 MB-INF-20200519

Analysis Date: 05/19/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Alkalinity in CaCO3 units

Analytical Batch: 1250460

202005190382 LH-INF-20200519
 202005190391 MB-INF-20200519

Analysis Date: 05/22/2020

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

Total Organic Carbon

Analytical Batch: 1251525

202005190382 LH-INF-20200519
 202005190391 MB-INF-20200519

Analysis Date: 05/28/2020

Analyzed by: ZS6I
 Analyzed by: ZS6I

EPA Method 537.1

Prep Batch: 1251017 Analytical Batch: 1251781

202005190374 GAC-1-20200519
 202005190375 GAC-2-20200519
 202005190376 GAC-3-20200519
 202005190377 GAC-4-20200519
 202005190378 IX-1-20200519
 202005190379 IX-2-20200519
 202005190380 IX-3-20200519
 202005190381 IX-4-20200519
 202005190382 LH-INF-20200519
 202005190383 GAC-5-20200519
 202005190384 GAC-6-20200519
 202005190385 GAC-7-20200519
 202005190386 GAC-8-20200519
 202005190387 IX-5-20200519
 202005190388 IX-6-20200519
 202005190389 IX-7-20200519
 202005190390 IX-8-20200519
 202005190391 MB-INF-20200519

Analysis Date: 05/28/2020

Analyzed by: KAM
 Analyzed by: KAM
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 Analyzed by: KAM

EPA Method 537.1

Prep Batch: 1251841 Analytical Batch: 1252352

202005190392 FB-20200519

Analysis Date: 06/01/2020

Analyzed by: SZZ

Tel: (626) 386-1100
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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1249655					Analysis Date: 05/19/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.58	mg/L	103	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)	20	1.6
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0493	mg/L	99	(50-150)		
MS_202005190099	Nitrate as Nitrogen by IC	ND	6.5	6.92	mg/L	109	(80-120)		
MS_202005190113	Nitrate as Nitrogen by IC	0.35	6.5	7.12	mg/L	108	(80-120)		
MSD_202005190099	Nitrate as Nitrogen by IC	ND	6.5	6.95	mg/L	110	(80-120)	20	0.49
MSD_202005190113	Nitrate as Nitrogen by IC	0.35	6.5	7.22	mg/L	110	(80-120)	20	1.4
LCS1	Nitrite Nitrogen by IC		1	1.05	mg/L	105	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.05	mg/L	105	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0514	mg/L	103	(50-150)		
MS_202005190099	Nitrite Nitrogen by IC	ND	2.5	2.82	mg/L	113	(80-120)		
MS_202005190113	Nitrite Nitrogen by IC	ND	2.5	2.66	mg/L	106	(80-120)		
MSD_202005190099	Nitrite Nitrogen by IC	ND	2.5	2.83	mg/L	113	(80-120)	20	0.18
MSD_202005190113	Nitrite Nitrogen by IC	ND	2.5	2.70	mg/L	108	(80-120)	20	1.4
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1249657					Analysis Date: 05/19/2020				
LCS1	Chloride		25	26.7	mg/L	107	(90-110)		
LCS2	Chloride		25	26.4	mg/L	106	(90-110)	20	1.1
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.465	mg/L	93	(50-150)		
MS_202005190099	Chloride	27	65	102	mg/L	119	(80-120)		
MS_202005190113	Chloride	180	65	239	mg/L	101	(80-120)		
MSD_202005190099	Chloride	27	65	102	mg/L	120	(80-120)	20	1
MSD_202005190113	Chloride	180	65	241	mg/L	104	(80-120)	20	0.75
LCS1	Sulfate		50	53.0	mg/L	106	(90-110)		
LCS2	Sulfate		50	52.4	mg/L	105	(90-110)	20	1.1
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.04	mg/L	104	(50-150)		
MRLLW	Sulfate		0.25	0.247	mg/L	99	(50-150)		
MS_202005190099	Sulfate	18	125	161	mg/L	114	(80-120)		
MS_202005190113	Sulfate	25	125	166	mg/L	113	(80-120)		
MSD_202005190099	Sulfate	18	125	161	mg/L	115	(80-120)	20	0.23

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202005190113	Sulfate	25	125	168	mg/L	115	(80-120)	20	1.1

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1250460

Analysis Date: 05/22/2020

LCS1	Alkalinity in CaCO3 units		100	97.8	mg/L	98	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.6	mg/L	99	(90-110)	20	0.82
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.99	mg/L	100	(50-150)		
MS_202004140066	Alkalinity in CaCO3 units	230	100	277	mg/L	46	(80-120)		
MS_202005080081	Alkalinity in CaCO3 units	ND	100	102	mg/L	102	(80-120)		
MSD_202004140066	Alkalinity in CaCO3 units	230	100	277	mg/L	46	(80-120)	20	0.069
MSD_202005080081	Alkalinity in CaCO3 units	ND	100	102	mg/L	102	(80-120)	20	0.23

Total Organic Carbon by SM 5310C

Analytical Batch: 1251525

Analysis Date: 05/28/2020

LCS1	Total Organic Carbon		5	4.84	mg/L	97	(90-110)		
LCS2	Total Organic Carbon		5	4.96	mg/L	99	(90-110)	20	2.5
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.248	mg/L	124	(50-150)		
MS_202005150246	Total Organic Carbon	6.8	8	15.6	mg/L	110	(80-120)		
MS2_202005130144	Total Organic Carbon	3.8	2	6.05	mg/L	110	(80-120)		
MSD_202005150246	Total Organic Carbon	6.8	8	15.5	mg/L	109	(80-120)	20	0.44
MSD2_202005130144	Total Organic Carbon	3.8	2	6.05	mg/L	110	(80-120)	20	0.033

EPA Method 537.1 by EPA 537.1

Prep Batch: 1251017 Analytical Batch: 1251781

Analysis Date: 05/28/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0241	ug/L	103	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0258	ug/L	110	(70-130)	30	6.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00206	ug/L	109	(50-150)		
MS_202005180036	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00208	ug/L	111	(50-150)		
MSD_202005180036	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00212	ug/L	113	(50-150)	50	1.7
LCS1	13C2-PFDA (S)		100	110	%	110	(70-130)		
LCS2	13C2-PFDA (S)		100	115	%	115	(70-130)		
MBLK	13C2-PFDA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	118	%	118	(70-130)		
MS_202005180036	13C2-PFDA (S)		100	105	%	105	(70-130)		
MSD_202005180036	13C2-PFDA (S)		100	115	%	115	(70-130)		
LCS1	13C2-PFHxA (S)		100	118	%	118	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	13C2-PFHxA (S)		100	121	%	121	(70-130)		
MBLK	13C2-PFHxA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	122	%	122	(70-130)		
MS_202005180036	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MSD_202005180036	13C2-PFHxA (S)		100	122	%	122	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MS_202005180036	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MSD_202005180036	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
MBLK	13C3-HFPO-DA (S)			108	%	108	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
MS_202005180036	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MSD_202005180036	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	97.5	%	98	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MS_202005180036	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MSD_202005180036	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0245	ug/L	104	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0254	ug/L	108	(70-130)	30	3.6
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00218	ug/L	116	(50-150)		
MS_202005180036	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00214	ug/L	113	(50-150)		
MSD_202005180036	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00219	ug/L	116	(50-150)	50	2.1
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0234	ug/L	100	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0249	ug/L	107	(70-130)	30	6.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00209	ug/L	112	(50-150)		
MS_202005180036	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00203	ug/L	109	(50-150)		
MSD_202005180036	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00204	ug/L	109	(50-150)	50	0.59
LCS1	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			106	%	106	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MS_202005180036	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MSD_202005180036	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
MBLK	d5-NEtFOSAA (S)			105	%	105	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
MS_202005180036	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MSD_202005180036	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0254	ug/L	102	(70-130)	30	1.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202005180036	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00204	ug/L	102	(50-150)		
MSD_202005180036	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00218	ug/L	109	(50-150)	50	6.9
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0240	ug/L	96	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0256	ug/L	103	(70-130)	30	6.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00212	ug/L	106	(50-150)		
MS_202005180036	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00221	ug/L	111	(50-150)		
MSD_202005180036	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00217	ug/L	109	(50-150)	50	1.9
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0239	ug/L	96	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0256	ug/L	102	(70-130)	30	6.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00224	ug/L	112	(50-150)		
MS_202005180036	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00212	ug/L	106	(50-150)		
MSD_202005180036	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00212	ug/L	106	(50-150)	50	0.030
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0238	ug/L	108	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0245	ug/L	111	(70-130)	30	2.9
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00201	ug/L	114	(50-150)		
MS_202005180036	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00210	ug/L	118	(50-150)		
MSD_202005180036	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00204	ug/L	116	(50-150)	50	2.8
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0275	ug/L	110	(70-130)	30	1.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00227	ug/L	114	(50-150)		
MS_202005180036	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00220	ug/L	110	(50-150)		

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Report: 871876
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202005180036	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00224	ug/L	112	(50-150)	50	1.6
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0265	ug/L	106	(70-130)	30	0.38
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202005180036	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202005180036	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00224	ug/L	112	(50-150)	50	3.7
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0285	ug/L	114	(70-130)	30	2.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00248	ug/L	124	(50-150)		
MS_202005180036	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00234	ug/L	117	(50-150)		
MSD_202005180036	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00246	ug/L	123	(50-150)	50	5.1
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0244	ug/L	107	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0257	ug/L	113	(70-130)	30	5.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00217	ug/L	119	(50-150)		
MS_202005180036	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00219	ug/L	120	(50-150)		
MSD_202005180036	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00209	ug/L	114	(50-150)	50	4.6
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0275	ug/L	110	(70-130)	30	1.1
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00242	ug/L	121	(50-150)		
MS_202005180036	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00230	ug/L	115	(50-150)		
MSD_202005180036	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00245	ug/L	122	(50-150)	50	6.3
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0259	ug/L	104	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0274	ug/L	110	(70-130)	30	5.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00239	ug/L	119	(50-150)		
MS_202005180036	Perfluorononanoic acid (PFNA)	ND	0.002	0.00221	ug/L	111	(50-150)		
MSD_202005180036	Perfluorononanoic acid (PFNA)	ND	0.002	0.00229	ug/L	114	(50-150)	50	3.5
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0237	ug/L	102	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0249	ug/L	108	(70-130)	30	4.9
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00211	ug/L	114	(50-150)		
MS_202005180036	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00211	ug/L	114	(50-150)		
MSD_202005180036	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00200	ug/L	108	(50-150)	50	5.2
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0261	ug/L	105	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0269	ug/L	108	(70-130)	30	3.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00248	ug/L	124	(50-150)		
MS_202005180036	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00232	ug/L	116	(50-150)		
MSD_202005180036	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00246	ug/L	123	(50-150)	50	5.8
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0296	ug/L	118	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0291	ug/L	117	(70-130)	30	1.7
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00264	ug/L	132	(50-150)		
MS_202005180036	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00256	ug/L	128	(50-150)		
MSD_202005180036	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00259	ug/L	130	(50-150)	50	1.1
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0277	ug/L	111	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0280	ug/L	112	(70-130)	30	1.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00236	ug/L	118	(50-150)		
MS_202005180036	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00222	ug/L	111	(50-150)		
MSD_202005180036	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00231	ug/L	116	(50-150)	50	3.8
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0256	ug/L	102	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0258	ug/L	103	(70-130)	30	1.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202005180036	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202005180036	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00215	ug/L	108	(50-150)	50	0.68

EPA Method 537.1 by EPA 537.1

Prep Batch: 1251841 Analytical Batch: 1252352

Analysis Date: 06/01/2020

DUP_202005280429	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0219	ug/L	93	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0223	ug/L	95	(70-130)	30	1.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00170	ug/L	91	(50-150)		
MS2_202005280146	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0436	ug/L	93	(70-130)		
DUP_202005280429	13C2-PFDA (S)			110	%	110	(70-130)		
LCS1	13C2-PFDA (S)		100	117	%	117	(70-130)		
LCS2	13C2-PFDA (S)		100	113	%	113	(70-130)		
MBLK	13C2-PFDA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	110	%	111	(70-130)		
MS2_202005280146	13C2-PFDA (S)		100	115	%	115	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202005280429	13C2-PFHxA (S)			113	%	113	(70-130)		
LCS1	13C2-PFHxA (S)		100	124	%	124	(70-130)		
LCS2	13C2-PFHxA (S)		100	122	%	122	(70-130)		
MBLK	13C2-PFHxA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MS2_202005280146	13C2-PFHxA (S)		100	121	%	121	(70-130)		
DUP_202005280429	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MS2_202005280146	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202005280429	13C3-HFPO-DA (S)			107	%	107	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	113	%	113	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
MBLK	13C3-HFPO-DA (S)			105	%	105	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS2_202005280146	13C3-HFPO-DA (S)		100	110	%	110	(70-130)		
DUP_202005280429	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	104	%	105	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			107	%	107	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS2_202005280146	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
DUP_202005280429	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0264	ug/L	112	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0259	ug/L	110	(70-130)	30	1.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00194	ug/L	103	(50-150)		
MS2_202005280146	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0469	ug/L	97	(70-130)		
DUP_202005280429	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0232	ug/L	100	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0243	ug/L	104	(70-130)	30	4.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00181	ug/L	97	(50-150)		
MS2_202005280146	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0458	ug/L	98	(70-130)		
DUP_202005280429	d3-NMeFOSAA (I)			95.1	%	95	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MBLK	d3-NMeFOSAA (I)			109	%	109	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MS2_202005280146	d3-NMeFOSAA (I)		100	96.9	%	97	(50-150)		
DUP_202005280429	d5-NEtFOSAA (S)			112	%	113	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		
MBLK	d5-NEtFOSAA (S)			117	%	117	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MS2_202005280146	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
DUP_202005280429	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0228	ug/L	91	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0227	ug/L	91	(70-130)	30	0.44
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00170	ug/L	85	(50-150)		
MS2_202005280146	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0454	ug/L	91	(70-130)		
DUP_202005280429	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0247	ug/L	99	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0248	ug/L	99	(70-130)	30	0.40
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202005280146	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0455	ug/L	91	(70-130)		
DUP_202005280429	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0257	ug/L	103	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0257	ug/L	103	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	112	(50-150)		
MS2_202005280146	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0479	ug/L	96	(70-130)		
DUP_202005280429	Perfluorobutanesulfonic acid (PFBS)	0.0056		0.00542	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0235	ug/L	106	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0234	ug/L	106	(70-130)	30	0.43
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00189	ug/L	107	(50-150)		
MS2_202005280146	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0455	ug/L	103	(70-130)		
DUP_202005280429	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0256	ug/L	103	(70-130)	30	1.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00198	ug/L	99	(50-150)		
MS2_202005280146	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0483	ug/L	97	(70-130)		
DUP_202005280429	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0256	ug/L	102	(70-130)	30	0.78
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00200	ug/L	100	(50-150)		
MS2_202005280146	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0484	ug/L	97	(70-130)		
DUP_202005280429	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0282	ug/L	113	(70-130)	30	0.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00221	ug/L	111	(50-150)		
MS2_202005280146	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0521	ug/L	104	(70-130)		
DUP_202005280429	Perfluorohexanesulfonic acid (PFHxS)	0.0035		0.00359	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0252	ug/L	110	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)	30	0.40
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00200	ug/L	109	(50-150)		
MS2_202005280146	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0490	ug/L	107	(70-130)		
DUP_202005280429	Perfluorohexanoic acid (PFHxA)	0.0096		0.00948	ug/L		(0-30)	30	1.4
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0274	ug/L	109	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0268	ug/L	107	(70-130)	30	2.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00215	ug/L	107	(50-150)		
MS2_202005280146	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0539	ug/L	108	(70-130)		
DUP_202005280429	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0265	ug/L	106	(70-130)	30	1.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00209	ug/L	104	(50-150)		
MS2_202005280146	Perfluorononanoic acid (PFNA)	ND	0.05	0.0500	ug/L	100	(70-130)		
DUP_202005280429	Perfluorooctanesulfonic acid (PFOS)	0.0034		0.00339	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0242	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)	30	2.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00206	ug/L	111	(50-150)		
MS2_202005280146	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0464	ug/L	100	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 871876
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202005280429	Perfluorooctanoic acid (PFOA)	0.0071		0.00716	ug/L		(0-30)	30	0.75
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0276	ug/L	110	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0265	ug/L	106	(70-130)	30	4.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00225	ug/L	112	(50-150)		
MS2_202005280146	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0521	ug/L	104	(70-130)		
DUP_202005280429	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0248	ug/L	99	(70-130)	30	0.80
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00185	ug/L	92	(50-150)		
MS2_202005280146	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0467	ug/L	93	(70-130)		
DUP_202005280429	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0242	ug/L	97	(70-130)	30	0.41
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00184	ug/L	92	(50-150)		
MS2_202005280146	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0457	ug/L	91	(70-130)		
DUP_202005280429	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0249	ug/L	100	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0244	ug/L	98	(70-130)	30	2.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00194	ug/L	97	(50-150)		
MS2_202005280146	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0482	ug/L	96	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 06/02/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 06/02/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 06/02/2020

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Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 06/02/2020

Quant Report - Page 1 of 1

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Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 872940
Project: 0250000
Group: WRD Pilot [Set #1]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 872940
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **May 26, 2020 at 1401**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202005260418	GAC-1-20200526	05/26/2020 0912
	Static ID: SET #1 537.1	
	@537.1	
202005260431	GAC-2-20200526	05/26/2020 0915
	@537.1	
202005260432	GAC-3-20200526	05/26/2020 0918
	@537.1	
202005260433	GAC-4-20200526	05/26/2020 0921
	@537.1	
202005260434	IX-1-20200526	05/26/2020 0924
	@537.1	
202005260435	IX-2-20200526	05/26/2020 0927
	@537.1	
202005260436	IX-3-20200526	05/26/2020 0930
	@537.1	
202005260437	IX-4-20200526	05/26/2020 0933
	@537.1	
202005260438	LH-INF-20200526	05/26/2020 0936
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Calcium Total ICAP
	Chloride	Iron Total ICAP
	Magnesium Total ICAP	Oil and Grease by 1664(subbed)
	Perchlorate	Sodium Total ICAP
	Sulfate	Total Hardness as CaCO3 by ICP
	Total Organic Carbon	Uranium by ICPMS as pCi/L
	Uranium ICAP/MS	
202005260439	LH-INF-DUP-20200526	05/26/2020 0937
	@537.1	
202005260440	GAC-5-20200526	05/26/2020 1112

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 872940
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **May 26, 2020 at 1401**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202005260441	GAC-6-20200526	05/26/2020 1115
	@537.1	
202005260442	GAC-7-20200526	05/26/2020 1118
	@537.1	
202005260443	GAC-8-20200526	05/26/2020 1121
	@537.1	
202005260444	IX-5-20200526	05/26/2020 1124
	@537.1	
202005260445	IX-6-20200526	05/26/2020 1127
	@537.1	
202005260446	IX-7-20200526	05/26/2020 1130
	@537.1	
202005260447	IX-8-20200526	05/26/2020 1133
	@537.1	
202005260448	MB-INF-20200526	05/26/2020 1136
	@537.1	
	Alkalinity in CaCO3 units	@ANIONS48
	Chloride	Arsenic Total ICAP/MS
	Magnesium Total ICAP	Hexavalent chromium(Dissolved)
	Perchlorate	Manganese Total ICAP/MS
	Sulfate	Potassium Total ICAP
	Total Organic Carbon	Total Dissolved Solid (TDS)
	Uranium ICAP/MS	Total Suspended Solids (TSS)
		@VOASDWA
		Calcium Total ICAP
		Iron Total ICAP
		Oil and Grease by 1664(subbed)
		Sodium Total ICAP
		Total Hardness as CaCO3 by ICP
		Uranium by ICPMS as pCi/L
202005260460	Field Blank - Hold	05/26/2020 1137
	@537.1 FB	

Test Description

@537.1 -- EPA Method 537.1

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 872940
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **May 26, 2020 at 1401**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1 FB -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	
	@VOASDWA -- Volatile Organics by GCMS	

072940

FROM: GSI Environmental Inc.
19200 Von Karman Ave, Suite 800
Irvine, CA 92612
(949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miae Jeon

GLOBAL ID:

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang

SAMPLER(S): (PRINT)
RDT

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

LABORATORY: Eurofins Eaton Analytical

TURNAROUND TIME: SAME DAY 24 HR 48 HR STANDARD
 72 HR 5 DAYS

SPECIAL INSTRUCTIONS:
Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com.
Provide EDD of sample results

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	RECEIVED		
		DATE	TIME			Unpreserved	Preserved	Field Filtered
	GAC-1-20200526	5-26	0912	Water	2			
	GAC-2-20200526		0915	Water	2			
	GAC-3-20200526		0918	Water	2			
	GAC-4-20200526		0921	Water	2			
	IX-1-20200526		0924	Water	2			
	IX-2-20200526		0927	Water	2			
	IX-3-20200526		0930	Water	2			
	IX-4-20200526		0933	Water	2			
	LH-INF-20200526		0936	Water	14	X		
	LH-INF-DUP-20200526		0937	Water	2			
	GAC-5-20200526		1112	Water	2			
	GAC-6-20200526		1115	Water	2			
	GAC-7-20200526		1118	Water	2			
	GAC-8-20200526		1121	Water	2			

Requested Analyses: PFAS - full list (EPA 537.1), Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0), Alkalinity (as CaCO3), (SM 2320B), Uranium, Arsenic, Manganese (EPA 200.8), Perchlorate (EPA 314.0), Hexavalent Chromium (EPA 218.6), Fe, Na, K, Ca, Mg (EPA 200.7), Total Hardness as CaCO3 (SM 2340B), VOCs (EPA 524.2), TOC (SM 5310C), TDS (E160.1/SM 2540C), TSS (SM 2540D), Oil & Grease (EPA 1664)

Received by: (Signature) *[Signature]* Date: 5-26-20 Time: 1345

Received by: (Signature) *[Signature]* Date: Date: Time:

Received by: (Signature) Date: Time:

<p>FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070</p> <p>TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com</p> <p>LABORATORY: Eurofins Eaton Analytical</p> <p>TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD</p> <p>SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results</p>	<p>PROJECT NAME: WRD Pilot</p> <p>PROJECT CONTACT: Miae Jeon</p> <p>GLOBAL ID:</p> <p>PROJECT NO.: 5302</p> <p>LAB CONTACT: Sophia Liang</p> <p>SAMPLER(S): (PRINT) <i>RDT</i></p>	<p>Requested Analyses</p> <p>Please check box or fill in blank as needed.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Requested Analyte</th> <th>Field Filtered</th> <th>Preserved</th> <th>Unpreserved</th> <th>No. of Cont.</th> <th>Matrix</th> <th>Sampling Date</th> <th>Sampling Time</th> <th>Notes</th> </tr> <tr> <td>PFAS - full list (EPA 537.1)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>5-26</td> <td>1124</td> <td></td> </tr> <tr> <td>Alkalinity (as CaCO3), (SM 2320B)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Uranium, Arsenic, Manganese (EPA 200.8)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Perchlorate (EPA 314.0)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Hexavalent Chromium (EPA 218.6)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Fe, Na, K, Ca, Mg (EPA 200.7)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total Hardness as CaCO3 (SM 2340B)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>VOCs (EPA 524.2)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TOC (SM 5310C)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TDS (E160.1/SM 2540C)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TSS (SM 2540D)</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Oil & Grease (EPA 1664)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>HOLD</td> </tr> </table>	Requested Analyte	Field Filtered	Preserved	Unpreserved	No. of Cont.	Matrix	Sampling Date	Sampling Time	Notes	PFAS - full list (EPA 537.1)	X								Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	X					5-26	1124		Alkalinity (as CaCO3), (SM 2320B)	X								Uranium, Arsenic, Manganese (EPA 200.8)	X								Perchlorate (EPA 314.0)	X								Hexavalent Chromium (EPA 218.6)	X								Fe, Na, K, Ca, Mg (EPA 200.7)	X								Total Hardness as CaCO3 (SM 2340B)	X								VOCs (EPA 524.2)	X								TOC (SM 5310C)	X								TDS (E160.1/SM 2540C)	X								TSS (SM 2540D)	X								Oil & Grease (EPA 1664)								HOLD
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Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: B72940

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 618A (Observation = 12.2 °C) (Corr.Factor = 0.2 °C) (Final = 12.0 °C)

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY:	PRINT NAME: <u>Victor Plasencia</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>5-22-20</u>	TIME: <u>1401</u>
--------------	-------------------------------------	---	----------------------	-------------------



Kit Order for Water Replenishment District

Eaton Analytical

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
 Monrovia, California 91016-3629
 (626) 386-1100 FAX (866) 988-3757

Created Date & Time: 4/30/2020 1:04:52PM

Note: Sampler Please return this paper with your samples

Client ID: WRD



Project Code: 0250000 Bottle Orders

Group Name: WRD Pilot [Set #1]

PO#/JOB#:

Description: WRD Pilot Set #1

Shipping Method: Pickup by client



Kit #: 262924

Created By: Sophia F Liang - [SFL]

Deliver By: 05/11/2020

STG: Bottle Orders

Ice Type: G

Pre Registered

Ship Sample Kits to
 GSI Environmental Inc.

 Attn: Robert Torres
 Phone: 951-616-8406

Send Report to
 Water Replenishment District
 4040 Paramount Blvd.
 Lakewood, CA 90712

 Attn: Joseph Liles
 Phone: 562-275-4226

Billing Address
 Water Replenishment District

 Attn: Eurofins Calscience

 Water Replenishment District
 4040 Paramount Blvd
 Lakewood, CA 90712

 Attn: Brian Partington
 Phone: 562-275-4249
 Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
2	Total Organic Carbon 1 - 125ml amber glass [0.5 ml H2SO4 (50%)]	2	UN1830
2	Hexavalent Chromium (Dissolved) 1 - 125ml poly [1.25 ml NH4SO4/NH4OH buffer]	2	
2	@ANIONS48, Chloride, Sulfate 1 - 125ml poly [no preservative]	2	
2	Perchlorate 1 - 125ml poly [no preservative]	2	
2	Oil and Grease by 1664(subbed) 2 - 1L amber glass [H2SO4 4 ml 50% H2SO4 & 4C]	4	
2	Alkalinity in CaCO3 units 1 - 250ml poly [no preservative]	2	
4	@537.1 2 - 275 ml polypro w polypro cap [1.4 g Trisma]	8	
2	@VOASDWA 3 - 40ml amber glass vial [4drops 6N HCL (36%)]	6	UN1789
2	Arsenic Total ICAP/MS, Calcium Total ICAP, Iron Total ICAP, Magnesium Total ICAP, Manganese Total ICAP/MS, Potassium Total ICAP, Sodium Total ICAP, Uranium by ICP/MS as pCrL, Uranium ICAP/MS 1 - 500ml acid poly [2ml HNO3 (18%)]	2	UN2031
2	Total Dissolved Solid (TDS), Total Suspended Solids (TSS) 1 - 500ml poly [no preservative]	2	

Sum Bottles: 32

Sum Tests: 22

Comments

Kit Order for Water Replenishment District

Eaton Analytical
Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 4/30/2020 1:04:52PM

Note: Sampler Please return this paper with your samples

Client ID: WRD



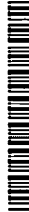
Project Code: 0250000 Bottle Orders

Group Name: WRD Pilot [Set #1]

PO#/JOB#:

Description: WRD Pilot Set #1

Shipping Method: Pickup by client



Kit #: 262924

Created By: Sophia F Liang - [SFL]

Deliver By: 05/11/2020

STG: Bottle Orders

Ice Type: G

Pre Registered

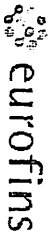
Ship Sample Kits to GSI Environmental Inc.	Send Report to Water Replenishment District 4040 Paramount Blvd. Lakewood, CA 90712	Billing Address Water Replenishment District
Attn: Robert Torres Phone: 951-616-8406	Attn: Joseph Liles Phone: 562-275-4226	Attn: Eurofins Calscience Water Replenishment District 4040 Paramount Blvd Lakewood, CA 90712

Ship Sample Kits to GSI Environmental Inc.	Send Report to Water Replenishment District 4040 Paramount Blvd. Lakewood, CA 90712	Billing Address Water Replenishment District
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# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
SHIPPING: - CLIENT P/U TUESDAY, MAY 12TH @ 1PM - PACKAGE IN 2 LARGE COOLERS GSI SAMPLER: - PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COOLERS WITH THE SAMPLES. - NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP. ASM: •Please also send invoices to Miae Jeon (mjeon@gsi-net.com) •Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pgalvin@gsi-net.com, and rdtorres@gsi-net.com.			

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.
SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 618A (Observation = 12.2 °C) (Corr. Factor = 0.2 °C) (Final = 12.0 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

- 5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____
- 6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____
- 7) VOA Headspace: _____ No Samples with Headspace: Samples with Headspace (see below):

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @Ch, 532,CMS, 556, 556, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY:	SIGNATURE	PRINT NAME: <u>Victor Paxoncia</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>5.21.20</u>	TIME: <u>1401</u>
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Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 872940
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944 exp 9-30-2020

Flags Legend:

BA - Target analyte detected in method blank at or above the laboratory minimum reporting limits (MRL), but analyte not present in the sample.

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

VC - CCV is high biased, ND data are reportable as per TNI V1M4 1.7.2.e).i.

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202005260438	<u>LH-INF-20200526</u>			
05/27/2020 19:59	Alkalinity in CaCO3 units		200		mg/L	2.0
05/27/2020 18:17	Arsenic Total ICAP/MS		3.3	10	ug/L	1.0
05/28/2020 12:36	Calcium Total ICAP		110		mg/L	1.0
05/26/2020 17:41	Chloride		110	250	mg/L	2.5
06/04/2020 15:56	Chloroform (Trichloromethane)		0.55		ug/L	0.50
06/02/2020 12:49	Hexavalent chromium(Dissolved)		0.70		ug/L	0.020
05/28/2020 12:36	Magnesium Total ICAP		21		mg/L	0.10
05/26/2020 17:41	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
05/26/2020 17:41	Nitrate as NO3 (calc)		12	45	mg/L	2.2
05/29/2020 09:57	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
05/29/2020 09:57	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
05/29/2020 09:57	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
05/29/2020 09:57	Perfluorononanoic acid (PFNA)		0.0033		ug/L	0.0020
05/29/2020 09:57	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
05/29/2020 09:57	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
05/28/2020 12:36	Potassium Total ICAP		4.6		mg/L	1.0
05/28/2020 12:36	Sodium Total ICAP		67		mg/L	1.0
05/26/2020 17:41	Sulfate		170	250	mg/L	2.5
05/28/2020 21:58	Total Dissolved Solids (TDS)		640	500	mg/L	10
05/28/2020 14:28	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
05/26/2020 17:41	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
06/02/2020 06:43	Total Organic Carbon		0.60		mg/L	0.30
06/04/2020 15:56	Total THM		0.55	80	ug/L	0.50
05/27/2020 18:27	Uranium by ICPMS as pCi/L		3.6		pCi/L	0.70
05/27/2020 18:17	Uranium ICAP/MS		5.4	30	ug/L	1.0
		202005260439	<u>LH-INF-DUP-20200526</u>			
05/29/2020 10:18	Perfluorobutanesulfonic acid (PFBS)		0.0056		ug/L	0.0020
05/29/2020 10:18	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
05/29/2020 10:18	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
05/29/2020 10:18	Perfluorononanoic acid (PFNA)		0.0033		ug/L	0.0020
05/29/2020 10:18	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
05/29/2020 10:18	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		202005260448	<u>MB-INF-20200526</u>			
05/27/2020 19:50	Alkalinity in CaCO3 units		170		mg/L	2.0
05/27/2020 18:19	Arsenic Total ICAP/MS		1.6	10	ug/L	1.0

SUMMARY OF POSITIVE DATA ONLY

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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
05/28/2020 12:37	Calcium Total ICAP		63		mg/L	1.0
05/26/2020 18:19	Chloride		52	250	mg/L	2.5
06/02/2020 12:20	Hexavalent chromium(Dissolved)		0.40		ug/L	0.020
05/28/2020 12:37	Magnesium Total ICAP		12		mg/L	0.10
05/26/2020 18:19	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
05/26/2020 18:19	Nitrate as NO3 (calc)		10	45	mg/L	2.2
05/29/2020 11:58	Perfluorobutanesulfonic acid (PFBS)		0.0097		ug/L	0.0020
05/29/2020 11:58	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
05/29/2020 11:58	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
05/29/2020 11:58	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
05/29/2020 11:58	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
05/29/2020 11:58	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
05/29/2020 11:58	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
05/28/2020 12:37	Potassium Total ICAP		3.9		mg/L	1.0
05/28/2020 12:37	Sodium Total ICAP		52		mg/L	1.0
05/26/2020 18:19	Sulfate		78	250	mg/L	2.5
05/28/2020 21:59	Total Dissolved Solids (TDS)		370	500	mg/L	10
05/28/2020 14:28	Total Hardness as CaCO3 by ICP (calc)		210		mg/L	3.0
05/26/2020 18:19	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
06/01/2020 21:11	Total Organic Carbon		0.77		mg/L	0.30
05/27/2020 18:27	Uranium by ICPMS as pCi/L		1.4		pCi/L	0.70
05/27/2020 18:19	Uranium ICAP/MS		2.2	30	ug/L	1.0

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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200526 (202005260418)					Sampled on 05/26/2020 0912				
Static ID: SET #1 537.1									
EPA 537.1 - EPA Method 537.1									
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	13C2-PFHxA	114	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/29/20 08:41	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	113	%		1

GAC-2-20200526 (202005260431)					Sampled on 05/26/2020 0915				
EPA 537.1 - EPA Method 537.1									
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	13C2-PFHxA	113	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	110	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/27/20	05/29/20 08:50	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	108	%		1

GAC-3-20200526 (202005260432)

Sampled on 05/26/2020 0918

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Water Replenishment District
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 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	13C2-PFHxA	113	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/27/20	05/29/20 09:00	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	118	%		1

GAC-4-20200526 (202005260433)

Sampled on 05/26/2020 0921

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	13C2-PFDA	112	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	13C2-PFHxA	114	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/27/20	05/29/20 09:09	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	112	%		1

IX-1-20200526 (202005260434)

Sampled on 05/26/2020 0924

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	13C2-PFDA	111	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	13C2-PFHxA	112	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	112	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/27/20	05/29/20 09:19	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	116	%		1

IX-2-20200526 (202005260435)

Sampled on 05/26/2020 0927

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	13C2-PFDA	112	%		1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	13C2-PFHxA	112	%		1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	107	%		1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	110	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:29	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	109	%		1
IX-3-20200526 (202005260436)					Sampled on 05/26/2020 0930				
EPA 537.1 - EPA Method 537.1									
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	13C2-PFDA	109	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	13C2-PFHxA	106	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	109	%		1
05/27/20	05/29/20 09:38	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	108	%		1

IX-4-20200526 (202005260437)

Sampled on 05/26/2020 0933

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	13C2-PFDA	109	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	13C2-PFHxA	110	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	104	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/27/20	05/29/20 09:48	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	107	%		1

LH-INF-20200526 (202005260438)

Sampled on 05/26/2020 0936

EPA 200.8 - ICPMS Metals

05/27/20	05/27/20 18:17	1251084	1251287	(EPA 200.8)	Arsenic Total ICAP/MS	3.3	ug/L	1.0	1
05/27/20	05/27/20 18:17	1251084	1251287	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
05/27/20	05/27/20 18:17	1251084	1251287	(EPA 200.8)	Uranium ICAP/MS	5.4	ug/L	1.0	1

EPA 200.7 - ICP Metals

05/27/20	05/28/20 12:36	1251084	1251430	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
05/27/20	05/28/20 12:36	1251084	1251430	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
05/27/20	05/28/20 12:36	1251084	1251430	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
05/27/20	05/28/20 12:36	1251084	1251430	(EPA 200.7)	Potassium Total ICAP	4.6	mg/L	1.0	1
05/27/20	05/28/20 12:36	1251084	1251430	(EPA 200.7)	Sodium Total ICAP	67	mg/L	1.0	1

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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
SM 5310C - Total Organic Carbon									
	06/02/20 06:43		1252402	(SM 5310C)	Total Organic Carbon	0.60	mg/L	0.30	1
EPA 200.8 - Uranium by ICPMS as pCi/L									
	05/27/20 18:27			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.6 (c)	pCi/L	0.70	1
SM 2340B - Total Hardness as CaCO3 by ICP									
	05/28/20 14:28			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
	06/02/20 12:49		1252533	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.70	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	05/26/20 17:41		1250939	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
	05/26/20 17:41		1250939	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
	05/26/20 17:41		1250939	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	05/26/20 17:41		1250939	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	05/26/20 17:41		1251012	(EPA 300.0)	Chloride	110	mg/L	2.5	5
	05/26/20 17:41		1251012	(EPA 300.0)	Sulfate	170	mg/L	2.5	5
EPA 314.0 - Perchlorate									
	05/28/20 18:45	(1)	1251176	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0033	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	13C2-PFDA	113	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	13C2-PFHxA	110	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	117	%		1
05/27/20	05/29/20 09:57	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	106	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	05/28/20 09:49			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.96	1
EPA 524.2 - Volatile Organics by GCMS									
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LM)	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromoform	ND (VC)	ug/L	0.50	1

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 Group: WRD Pilot [Set #1]

Water Replenishment District
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 4040 Paramount Blvd.
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Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Chlorodibromomethane	ND (VC)	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Chloroform (Trichloromethane)	0.55	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Naphthalene	ND (BA,LM)	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1

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Samples Received on:
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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Total THM	0.55	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	1,2-Dichloroethane-d4	106	%		1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	4-Bromofluorobenzene	91	%		1
06/04/20	06/04/20 15:56	1253072	1253202	(EPA 524.2)	Toluene-d8	97	%		1
SM 2320B - Alkalinity in CaCO3 units									
	05/27/20 19:59		1251220	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
05/28/20	05/28/20 21:58	1251658	1251659	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	640	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	05/31/20 14:23		1251944	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<u>LH-INF-DUP-20200526 (202005260439)</u>					Sampled on 05/26/2020 0937				
EPA 537.1 - EPA Method 537.1									
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0056	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0033	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	13C2-PFDA	113	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	13C2-PFHxA	109	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	118	%		1
05/27/20	05/29/20 10:18	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	110	%		1

GAC-5-20200526 (202005260440)

Sampled on 05/26/2020 1112

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	13C2-PFDA	112	%		1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	13C2-PFHxA	112	%		1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1

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Tel: (626) 386-1100
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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	106	%		1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/27/20	05/29/20 10:29	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	112	%		1

GAC-6-20200526 (202005260441)

Sampled on 05/26/2020 1115

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	13C2-PFDA	114	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	13C2-PFHxA	115	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	111	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	110	%		1
05/27/20	05/29/20 10:38	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	113	%		1

GAC-7-20200526 (202005260442)

Sampled on 05/26/2020 1118

EPA 537.1 - EPA Method 537.1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	13C2-PFDA	113	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	13C2-PFHxA	111	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	108	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	112	%		1
05/27/20	05/29/20 10:59	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	112	%		1

GAC-8-20200526 (202005260443)

Sampled on 05/26/2020 1121

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	13C2-PFDA	111	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	13C2-PFHxA	116	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	109	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/29/20 11:10	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	112	%		1

IX-5-20200526 (202005260444)

Sampled on 05/26/2020 1124

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	13C2-PFDA	111	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	13C2-PFHxA	109	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	116	%		1
05/27/20	05/29/20 11:20	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	110	%		1

IX-6-20200526 (202005260445)

Sampled on 05/26/2020 1127

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	13C2-PFDA	103	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	13C2-PFHxA	101	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	100	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	114	%		1
05/27/20	05/29/20 11:29	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	106	%		1

IX-7-20200526 (202005260446)

Sampled on 05/26/2020 1130

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	13C2-PFDA	115	%		1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	13C2-PFHxA	112	%		1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1

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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	106	%		1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	111	%		1
05/27/20	05/29/20 11:39	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	113	%		1

IX-8-20200526 (202005260447)

Sampled on 05/26/2020 1133

EPA 537.1 - EPA Method 537.1

05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	13C2-PFDA	107	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	13C2-PFHxA	106	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	104	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	113	%		1
05/27/20	05/29/20 11:48	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	110	%		1

MB-INF-20200526 (202005260448)

Sampled on 05/26/2020 1136

EPA 200.8 - ICPMS Metals

Rounding on totals after summation.
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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution	
05/27/20	05/27/20 18:19	1251084	1251287	(EPA 200.8)	Arsenic Total ICAP/MS	1.6	ug/L	1.0	1	
05/27/20	05/27/20 18:19	1251084	1251287	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1	
05/27/20	05/27/20 18:19	1251084	1251287	(EPA 200.8)	Uranium ICAP/MS	2.2	ug/L	1.0	1	
EPA 200.7 - ICP Metals										
05/27/20	05/28/20 12:37	1251084	1251430	(EPA 200.7)	Calcium Total ICAP	63	mg/L	1.0	1	
05/27/20	05/28/20 12:37	1251084	1251430	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1	
05/27/20	05/28/20 12:37	1251084	1251430	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1	
05/27/20	05/28/20 12:37	1251084	1251430	(EPA 200.7)	Potassium Total ICAP	3.9	mg/L	1.0	1	
05/27/20	05/28/20 12:37	1251084	1251430	(EPA 200.7)	Sodium Total ICAP	52	mg/L	1.0	1	
SM 5310C - Total Organic Carbon										
06/01/20	21:11		1252401	(SM 5310C)	Total Organic Carbon	0.77	mg/L	0.30	1	
EPA 200.8 - Uranium by ICPMS as pCi/L										
05/27/20	18:27			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.4 (c)	pCi/L	0.70	1	
SM 2340B - Total Hardness as CaCO3 by ICP										
05/28/20	14:28			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	210 (c)	mg/L	3.0	1	
EPA 218.6 - Hexavalent chromium(Dissolved)										
06/02/20	12:20		1252533	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.40	ug/L	0.020	1	
EPA 300.0 - Nitrate, Nitrite by EPA 300.0										
05/26/20	18:19		1250939	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5	
05/26/20	18:19		1250939	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5	
05/26/20	18:19		1250939	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5	
05/26/20	18:19		1250939	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1	
EPA 300.0 - Chloride, Sulfate by EPA 300.0										
05/26/20	18:19		1251012	(EPA 300.0)	Chloride	52	mg/L	2.5	5	
05/26/20	18:19		1251012	(EPA 300.0)	Sulfate	78	mg/L	2.5	5	
EPA 314.0 - Perchlorate										
05/28/20	19:34	(1)	1251176	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1	
EPA 537.1 - EPA Method 537.1										
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58		1251157	1251784	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

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 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0097	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	13C2-PFDA	110	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	13C2-PFHxA	104	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	13C3-HFPO-DA	97	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	d3-NMeFOSAA	125	%		1
05/27/20	05/29/20 11:58	1251157	1251784	(EPA 537.1)	d5-NEtFOSAA	109	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	05/28/20 09:49			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.95	1
EPA 524.2 - Volatile Organics by GCMS									
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LM)	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromoform	ND (VC)	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Chlorodibromomethane	ND (VC)	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Naphthalene	ND (BA,LM)	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1

Rounding on totals after summation.
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Report: 872940
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 Group: WRD Pilot [Set #1]

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Samples Received on:
 05/26/2020 1401

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	1,2-Dichloroethane-d4	100	%		1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	4-Bromofluorobenzene	100	%		1
06/04/20	06/04/20 16:19	1253072	1253202	(EPA 524.2)	Toluene-d8	96	%		1
SM 2320B - Alkalinity in CaCO3 units									
	05/27/20 19:50		1251220	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
05/28/20	05/28/20 21:59	1251658	1251659	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	370	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	05/31/20 14:24		1251944	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
Field Blank - Hold (202005260460)									
EPA 537.1 - EPA Method 537.1									
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Sampled on 05/26/2020 1137

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05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	13C2-PFDA	109	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	13C2-PFHxA	120	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	13C3-HFPO-DA	104	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	d3-NMeFOSAA	92	%		1
05/29/20	06/01/20 12:46	1251841	1252352	(EPA 537.1)	d5-NEtFOSAA	116	%		1

Rounding on totals after summation.
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Report: 872940
Project: 0250000
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Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1250939

202005260438 LH-INF-20200526
 202005260448 MB-INF-20200526

Analysis Date: 05/26/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1251012

202005260438 LH-INF-20200526
 202005260448 MB-INF-20200526

Analysis Date: 05/26/2020

Analyzed by: B9PD
 Analyzed by: B9PD

Perchlorate

Analytical Batch: 1251176

202005260438 LH-INF-20200526
 202005260448 MB-INF-20200526

Analysis Date: 05/28/2020

Analyzed by: H5VG
 Analyzed by: H5VG

Alkalinity in CaCO3 units

Analytical Batch: 1251220

202005260438 LH-INF-20200526
 202005260448 MB-INF-20200526

Analysis Date: 05/27/2020

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

ICPMS Metals

Prep Batch: 1251084 Analytical Batch: 1251287

202005260438 LH-INF-20200526
 202005260448 MB-INF-20200526

Analysis Date: 05/27/2020

Analyzed by: DHX7
 Analyzed by: DHX7

ICP Metals

Prep Batch: 1251084 Analytical Batch: 1251430

202005260438 LH-INF-20200526
 202005260448 MB-INF-20200526

Analysis Date: 05/28/2020

Analyzed by: NINA
 Analyzed by: NINA

Total Dissolved Solids (TDS)

Prep Batch: 1251658 Analytical Batch: 1251659

202005260438 LH-INF-20200526
 202005260448 MB-INF-20200526

Analysis Date: 05/28/2020

Analyzed by: TJ52
 Analyzed by: TJ52

EPA Method 537.1

Prep Batch: 1251157 Analytical Batch: 1251784

202005260418 GAC-1-20200526
 202005260431 GAC-2-20200526
 202005260432 GAC-3-20200526
 202005260433 GAC-4-20200526
 202005260434 IX-1-20200526
 202005260435 IX-2-20200526
 202005260436 IX-3-20200526
 202005260437 IX-4-20200526
 202005260438 LH-INF-20200526
 202005260439 LH-INF-DUP-20200526
 202005260440 GAC-5-20200526
 202005260441 GAC-6-20200526

Analysis Date: 05/29/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 872940
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

202005260442	GAC-7-20200526	Analyzed by: KAM
202005260443	GAC-8-20200526	Analyzed by: KAM
202005260444	IX-5-20200526	Analyzed by: KAM
202005260445	IX-6-20200526	Analyzed by: KAM
202005260446	IX-7-20200526	Analyzed by: KAM
202005260447	IX-8-20200526	Analyzed by: KAM
202005260448	MB-INF-20200526	Analyzed by: KAM
Total Suspended Solids (TSS)		
Analytical Batch: 1251944		
202005260438	LH-INF-20200526	Analyzed by: TJ52
202005260448	MB-INF-20200526	Analyzed by: TJ52
EPA Method 537.1		
Prep Batch: 1251841 Analytical Batch: 1252352		
202005260460	Field Blank - Hold	Analyzed by: SZZ
Total Organic Carbon		
Analytical Batch: 1252401		
202005260448	MB-INF-20200526	Analyzed by: ZS6I
Total Organic Carbon		
Analytical Batch: 1252402		
202005260438	LH-INF-20200526	Analyzed by: ZS6I
Hexavalent chromium(Dissolved)		
Analytical Batch: 1252533		
202005260438	LH-INF-20200526	Analyzed by: TLH
202005260448	MB-INF-20200526	Analyzed by: TLH
Volatile Organics by GCMS		
Prep Batch: 1253072 Analytical Batch: 1253202		
202005260438	LH-INF-20200526	Analyzed by: TR7W
202005260448	MB-INF-20200526	Analyzed by: TR7W

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1250939					Analysis Date: 05/26/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.51	mg/L	100	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.51	mg/L	101	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0533	mg/L	107	(50-150)		
MS_202005260153	Nitrate as Nitrogen by IC	8.0	2.6	10.8	mg/L	109	(80-120)		
MS_202005260438	Nitrate as Nitrogen by IC	2.8	6.5	9.41	mg/L	106	(80-120)		
MSD_202005260153	Nitrate as Nitrogen by IC	8.0	2.6	10.8	mg/L	110	(80-120)	20	0.35
MSD_202005260438	Nitrate as Nitrogen by IC	2.8	6.5	9.50	mg/L	108	(80-120)	20	0.97
LCS1	Nitrite Nitrogen by IC		1	0.968	mg/L	97	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.970	mg/L	97	(90-110)	20	0.21
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0492	mg/L	98	(50-150)		
MS_202005260153	Nitrite Nitrogen by IC	ND	1	0.965	mg/L	97	(80-120)		
MS_202005260438	Nitrite Nitrogen by IC	ND	2.5	2.46	mg/L	99	(80-120)		
MSD_202005260153	Nitrite Nitrogen by IC	ND	1	0.973	mg/L	97	(80-120)	20	0.83
MSD_202005260438	Nitrite Nitrogen by IC	ND	2.5	2.39	mg/L	96	(80-120)	20	3.0
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1251012					Analysis Date: 05/26/2020				
LCS1	Chloride		25	25.6	mg/L	102	(90-110)		
LCS2	Chloride		25	25.7	mg/L	103	(90-110)	20	0.39
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.432	mg/L	86	(50-150)		
MS_202005260438	Chloride	110	65	170	mg/L	102	(80-120)		
MSD_202005260438	Chloride	110	65	173	mg/L	108	(80-120)	20	1.7
LCS1	Sulfate		50	50.8	mg/L	102	(90-110)		
LCS2	Sulfate		50	50.9	mg/L	102	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.952	mg/L	95	(50-150)		
MRLW	Sulfate		0.25	0.236	mg/L	94	(50-150)		
MS_202005260438	Sulfate	170	125	303	mg/L	104	(80-120)		
MSD_202005260438	Sulfate	170	125	309	mg/L	109	(80-120)	20	1.9
Perchlorate by EPA 314.0									
Analytical Batch: 1251176					Analysis Date: 05/28/2020				
LCS1	Perchlorate		25	25.4	ug/L	101	(85-115)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perchlorate		25	25.2	ug/L	101	(85-115)	15	0.79
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.84	ug/L	96	(75-125)		
MS_202005200604	Perchlorate	ND	25	24.7	ug/L	99	(80-120)		
MSD_202005200604	Perchlorate	ND	25	24.3	ug/L	97	(80-120)	15	1.6

Alkalinity in CaCO3 units by SM 2320B
Analytical Batch: 1251220

Analysis Date: 05/27/2020

LCS1	Alkalinity in CaCO3 units		100	99.8	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.84	mg/L	92	(50-150)		
MS_202004160356	Alkalinity in CaCO3 units	2.5	100	106	mg/L	104	(80-120)		
MS_202005220164	Alkalinity in CaCO3 units	140	100	242	mg/L	104	(80-120)		
MSD_202004160356	Alkalinity in CaCO3 units	2.5	100	108	mg/L	106	(80-120)	20	2.3
MSD_202005220164	Alkalinity in CaCO3 units	140	100	243	mg/L	104	(80-120)	20	0.24

ICPMS Metals by EPA 200.8

Analytical Batch: 1251287

Analysis Date: 05/27/2020

LCS1	Arsenic Total ICAP/MS		50	49.3	ug/L	99	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.8	ug/L	98	(85-115)	20	1.0
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.05	ug/L	105	(50-150)		
MS_202005220334	Arsenic Total ICAP/MS	7.4	50	58.7	ug/L	102	(70-130)		
MS2_202005260243	Arsenic Total ICAP/MS	ND	50	51.9	ug/L	102	(70-130)		
MSD_202005220334	Arsenic Total ICAP/MS	7.4	50	55.6	ug/L	96	(70-130)	20	5.4
MSD2_202005260243	Arsenic Total ICAP/MS	ND	50	51.2	ug/L	100	(70-130)	20	1.4
LCS1	Manganese Total ICAP/MS		100	98.3	ug/L	98	(85-115)		
LCS2	Manganese Total ICAP/MS		100	97.7	ug/L	98	(85-115)	20	0.61
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	1.98	ug/L	99	(50-150)		
MS_202005220334	Manganese Total ICAP/MS	ND	100	93.2	ug/L	93	(70-130)		
MS2_202005260243	Manganese Total ICAP/MS	ND	100	91.4	ug/L	91	(70-130)		
MSD_202005220334	Manganese Total ICAP/MS	ND	100	87.6	ug/L	88	(70-130)	20	6.2
MSD2_202005260243	Manganese Total ICAP/MS	ND	100	89.0	ug/L	89	(70-130)	20	2.7
LCS1	Uranium ICAP/MS		50	50.0	ug/L	100	(85-115)		
LCS2	Uranium ICAP/MS		50	49.4	ug/L	99	(85-115)	20	1.2
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.951	ug/L	95	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005220334	Uranium ICAP/MS	5.7	50	55.5	ug/L	100	(70-130)		
MS2_202005260243	Uranium ICAP/MS	16	50	65.2	ug/L	99	(70-130)		
MSD_202005220334	Uranium ICAP/MS	5.7	50	52.0	ug/L	93	(70-130)	20	6.5
MSD2_202005260243	Uranium ICAP/MS	16	50	62.9	ug/L	95	(70-130)	20	3.6

ICP Metals by EPA 200.7

Analytical Batch: 1251430

Analysis Date: 05/28/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Calcium Total ICAP		50	49.9	mg/L	100	(85-115)		
LCS2	Calcium Total ICAP		50	49.9	mg/L	100	(85-115)	20	0.0
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.988	mg/L	99	(50-150)		
MS_202005260739	Calcium Total ICAP	46	50	92.4	mg/L	94	(70-130)		
MS2_202004220528	Calcium Total ICAP	97	50	141	mg/L	88	(70-130)		
MSD_202005260739	Calcium Total ICAP	46	50	92.4	mg/L	94	(70-130)	20	0.027
MSD2_202004220528	Calcium Total ICAP	97	50	140	mg/L	87	(70-130)	20	0.62
LCS1	Iron Total ICAP		5	5.03	mg/L	101	(85-115)		
LCS2	Iron Total ICAP		5	5.01	mg/L	100	(85-115)	20	0.40
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0210	mg/L	105	(50-150)		
MS_202005260739	Iron Total ICAP	ND	5	4.97	mg/L	99	(70-130)		
MS2_202004220528	Iron Total ICAP	ND	5	4.95	mg/L	99	(70-130)		
MSD_202005260739	Iron Total ICAP	ND	5	4.97	mg/L	99	(70-130)	20	0.019
MSD2_202004220528	Iron Total ICAP	ND	5	4.93	mg/L	99	(70-130)	20	0.46
LCS1	Magnesium Total ICAP		20	19.9	mg/L	100	(85-115)		
LCS2	Magnesium Total ICAP		20	19.8	mg/L	99	(85-115)	20	0.50
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0972	mg/L	97	(50-150)		
MS_202005260739	Magnesium Total ICAP	10	20	29.9	mg/L	98	(70-130)		
MS2_202004220528	Magnesium Total ICAP	30	20	49.0	mg/L	94	(70-130)		
MSD_202005260739	Magnesium Total ICAP	10	20	29.8	mg/L	97	(70-130)	20	0.24
MSD2_202004220528	Magnesium Total ICAP	30	20	48.9	mg/L	94	(70-130)	20	0.24
LCS1	Potassium Total ICAP		20	20.0	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	19.9	mg/L	100	(85-115)	20	0.50
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.707	mg/L	71	(50-150)		
MS_202005260739	Potassium Total ICAP	2.1	20	23.1	mg/L	105	(70-130)		
MS2_202004220528	Potassium Total ICAP	1.7	20	23.0	mg/L	107	(70-130)		
MSD_202005260739	Potassium Total ICAP	2.1	20	23.1	mg/L	105	(70-130)	20	0.073

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD2_202004220528	Potassium Total ICAP	1.7	20	22.9	mg/L	106	(70-130)	20	0.63
LCS1	Sodium Total ICAP		50	49.7	mg/L	100	(85-115)		
LCS2	Sodium Total ICAP		50	49.5	mg/L	99	(85-115)	20	0.40
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.839	mg/L	84	(50-150)		
MS_202005260739	Sodium Total ICAP	36	50	82.9	mg/L	94	(70-130)		
MS2_202004220528	Sodium Total ICAP	34	50	81.0	mg/L	94	(70-130)		
MSD_202005260739	Sodium Total ICAP	36	50	83.4	mg/L	94	(70-130)	20	0.56
MSD2_202004220528	Sodium Total ICAP	34	50	80.8	mg/L	94	(70-130)	20	0.21

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1251659

Analysis Date: 05/28/2020

DUP	Total Dissolved Solid (TDS)	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202005220226	Total Dissolved Solid (TDS)	610		614	mg/L		(0-10)	10	0.0
DUP_202005260928	Total Dissolved Solid (TDS)	730		736	mg/L		(0-10)	10	0.82
LCS1	Total Dissolved Solid (TDS)		175	172	mg/L	98	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	680	mg/L	97	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	10.0	mg/L	100	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1251157 Analytical Batch: 1251784

Analysis Date: 05/29/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0252	ug/L	107	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0267	ug/L	113	(70-130)	30	5.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00206	ug/L	110	(50-150)		
MS_202005260065	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00210	ug/L	112	(50-150)		
MSD_202005260065	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00210	ug/L	112	(50-150)	50	0.018
LCS1	13C2-PFDA (S)		100	117	%	117	(70-130)		
LCS2	13C2-PFDA (S)		100	115	%	115	(70-130)		
MBLK	13C2-PFDA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	109	%	109	(70-130)		
MS_202005260065	13C2-PFDA (S)		100	115	%	115	(70-130)		
MSD_202005260065	13C2-PFDA (S)		100	112	%	112	(70-130)		
LCS1	13C2-PFHxA (S)		100	121	%	121	(70-130)		
LCS2	13C2-PFHxA (S)		100	116	%	117	(70-130)		
MBLK	13C2-PFHxA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	114	%	114	(70-130)		
MS_202005260065	13C2-PFHxA (S)		100	114	%	114	(70-130)		
MSD_202005260065	13C2-PFHxA (S)		100	113	%	113	(70-130)		

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	102	%	103	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			105	%	105	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MS_202005260065	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MSD_202005260065	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	110	%	111	(70-130)		
MBLK	13C3-HFPO-DA (S)			107	%	107	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
MS_202005260065	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
MSD_202005260065	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS_202005260065	13C4-PFOS- IS#2 (I)		100	109	%	109	(50-150)		
MSD_202005260065	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0237	ug/L	100	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0246	ug/L	104	(70-130)	30	3.7
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS_202005260065	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00206	ug/L	109	(50-150)		
MSD_202005260065	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00200	ug/L	106	(50-150)	50	3.1
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0225	ug/L	97	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0242	ug/L	104	(70-130)	30	7.3
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00183	ug/L	99	(50-150)		
MS_202005260065	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00193	ug/L	104	(50-150)		
MSD_202005260065	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00190	ug/L	102	(50-150)	50	1.7
LCS1	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			112	%	113	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	115	%	115	(50-150)		
MS_202005260065	d3-NMeFOSAA (I)		100	114	%	114	(50-150)		
MSD_202005260065	d3-NMeFOSAA (I)		100	112	%	113	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	112	%	113	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
MS_202005260065	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
MSD_202005260065	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0265	ug/L	106	(70-130)	30	8.3
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00198	ug/L	99	(50-150)		
MS_202005260065	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00206	ug/L	103	(50-150)		
MSD_202005260065	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00197	ug/L	99	(50-150)	50	4.2
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0243	ug/L	97	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0254	ug/L	101	(70-130)	30	4.4
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00202	ug/L	101	(50-150)		
MS_202005260065	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202005260065	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00206	ug/L	103	(50-150)	50	4.8
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0240	ug/L	96	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0252	ug/L	101	(70-130)	30	4.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00197	ug/L	98	(50-150)		
MS_202005260065	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00209	ug/L	105	(50-150)		
MSD_202005260065	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00203	ug/L	102	(50-150)	50	3.1
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0214	ug/L	97	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0229	ug/L	104	(70-130)	30	6.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00183	ug/L	103	(50-150)		
MS_202005260065	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00187	ug/L	106	(50-150)		
MSD_202005260065	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00190	ug/L	107	(50-150)	50	1.7
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0272	ug/L	109	(70-130)	30	6.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202005260065	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202005260065	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00233	ug/L	117	(50-150)	50	7.3
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0258	ug/L	103	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0274	ug/L	110	(70-130)	30	5.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00204	ug/L	102	(50-150)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005260065	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00224	ug/L	112	(50-150)		
MSD_202005260065	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00218	ug/L	109	(50-150)	50	2.7
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0267	ug/L	107	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0282	ug/L	113	(70-130)	30	5.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202005260065	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00237	ug/L	117	(50-150)		
MSD_202005260065	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00228	ug/L	112	(50-150)	50	4.0
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0223	ug/L	98	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0242	ug/L	106	(70-130)	30	8.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00192	ug/L	105	(50-150)		
MS_202005260065	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00200	ug/L	110	(50-150)		
MSD_202005260065	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00202	ug/L	111	(50-150)	50	1.1
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0259	ug/L	103	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0273	ug/L	109	(70-130)	30	5.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202005260065	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00221	ug/L	105	(50-150)		
MSD_202005260065	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00228	ug/L	109	(50-150)	50	3.3
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0269	ug/L	108	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0281	ug/L	112	(70-130)	30	4.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202005260065	Perfluorononanoic acid (PFNA)	ND	0.002	0.00219	ug/L	109	(50-150)		
MSD_202005260065	Perfluorononanoic acid (PFNA)	ND	0.002	0.00236	ug/L	118	(50-150)	50	7.6
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0232	ug/L	100	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0244	ug/L	105	(70-130)	30	5.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00202	ug/L	109	(50-150)		
MS_202005260065	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00204	ug/L	105	(50-150)		
MSD_202005260065	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00205	ug/L	106	(50-150)	50	0.55
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0256	ug/L	102	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0274	ug/L	109	(70-130)	30	6.8
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202005260065	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00240	ug/L	113	(50-150)		
MSD_202005260065	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00225	ug/L	105	(50-150)	50	6.5

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 872940
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0301	ug/L	120	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0313	ug/L	125	(70-130)	30	3.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00257	ug/L	128	(50-150)		
MS_202005260065	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00274	ug/L	122	(50-150)		
MSD_202005260065	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00284	ug/L	127	(50-150)	50	3.6
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0283	ug/L	113	(70-130)	30	6.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202005260065	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00229	ug/L	114	(50-150)		
MSD_202005260065	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00229	ug/L	115	(50-150)	50	0.077
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0278	ug/L	111	(70-130)	30	7.8
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00223	ug/L	111	(50-150)		
MS_202005260065	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00221	ug/L	110	(50-150)		
MSD_202005260065	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00221	ug/L	111	(50-150)	50	0.11

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1251944

Analysis Date: 05/31/2020

DUP_202004220040	Total Suspended Solids (TSS)	280		258	mg/L		(0-10)	10	9.6
DUP_202004220077	Total Suspended Solids (TSS)	98		96.0	mg/L		(0-10)	10	2.1
LCS1	Total Suspended Solids (TSS)		175	164	mg/L	94	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	160	mg/L	91	(71-107)	20	2.5
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	8.00	mg/L	80	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1251841 Analytical Batch: 1252352

Analysis Date: 06/01/2020

DUP_202005280429	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0219	ug/L	93	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0223	ug/L	95	(70-130)	30	1.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00170	ug/L	91	(50-150)		
MS2_202005280146	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0436	ug/L	93	(70-130)		
DUP_202005280429	13C2-PFDA (S)			110	%	110	(70-130)		
LCS1	13C2-PFDA (S)		100	117	%	117	(70-130)		
LCS2	13C2-PFDA (S)		100	113	%	113	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFDA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	110	%	111	(70-130)		
MS2_202005280146	13C2-PFDA (S)		100	115	%	115	(70-130)		
DUP_202005280429	13C2-PFHxA (S)			113	%	113	(70-130)		
LCS1	13C2-PFHxA (S)		100	124	%	124	(70-130)		
LCS2	13C2-PFHxA (S)		100	122	%	122	(70-130)		
MBLK	13C2-PFHxA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MS2_202005280146	13C2-PFHxA (S)		100	121	%	121	(70-130)		
DUP_202005280429	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MS2_202005280146	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202005280429	13C3-HFPO-DA (S)			107	%	107	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	113	%	113	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
MBLK	13C3-HFPO-DA (S)			105	%	105	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS2_202005280146	13C3-HFPO-DA (S)		100	110	%	110	(70-130)		
DUP_202005280429	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	104	%	105	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			107	%	107	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS2_202005280146	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
DUP_202005280429	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0264	ug/L	112	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0259	ug/L	110	(70-130)	30	1.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00194	ug/L	103	(50-150)		
MS2_202005280146	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0469	ug/L	97	(70-130)		
DUP_202005280429	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0232	ug/L	100	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0243	ug/L	104	(70-130)	30	4.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00181	ug/L	97	(50-150)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202005280146	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0458	ug/L	98	(70-130)		
DUP_202005280429	d3-NMeFOSAA (I)			95.1	%	95	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MBLK	d3-NMeFOSAA (I)			109	%	109	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MS2_202005280146	d3-NMeFOSAA (I)		100	96.9	%	97	(50-150)		
DUP_202005280429	d5-NEtFOSAA (S)			112	%	113	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		
MBLK	d5-NEtFOSAA (S)			117	%	117	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MS2_202005280146	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
DUP_202005280429	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0228	ug/L	91	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0227	ug/L	91	(70-130)	30	0.44
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00170	ug/L	85	(50-150)		
MS2_202005280146	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0454	ug/L	91	(70-130)		
DUP_202005280429	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0247	ug/L	99	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0248	ug/L	99	(70-130)	30	0.40
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202005280146	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0455	ug/L	91	(70-130)		
DUP_202005280429	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0257	ug/L	103	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0257	ug/L	103	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	112	(50-150)		
MS2_202005280146	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0479	ug/L	96	(70-130)		
DUP_202005280429	Perfluorobutanesulfonic acid (PFBS)	0.0056		0.00542	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0235	ug/L	106	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0234	ug/L	106	(70-130)	30	0.43
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00189	ug/L	107	(50-150)		
MS2_202005280146	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0455	ug/L	103	(70-130)		
DUP_202005280429	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		

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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0256	ug/L	103	(70-130)	30	1.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00198	ug/L	99	(50-150)		
MS2_202005280146	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0483	ug/L	97	(70-130)		
DUP_202005280429	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0256	ug/L	102	(70-130)	30	0.78
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00200	ug/L	100	(50-150)		
MS2_202005280146	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0484	ug/L	97	(70-130)		
DUP_202005280429	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0282	ug/L	113	(70-130)	30	0.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00221	ug/L	111	(50-150)		
MS2_202005280146	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0521	ug/L	104	(70-130)		
DUP_202005280429	Perfluorohexanesulfonic acid (PFHxS)	0.0035		0.00359	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0252	ug/L	110	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)	30	0.40
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00200	ug/L	109	(50-150)		
MS2_202005280146	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0490	ug/L	107	(70-130)		
DUP_202005280429	Perfluorohexanoic acid (PFHxA)	0.0096		0.00948	ug/L		(0-30)	30	1.4
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0274	ug/L	109	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0268	ug/L	107	(70-130)	30	2.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00215	ug/L	107	(50-150)		
MS2_202005280146	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0539	ug/L	108	(70-130)		
DUP_202005280429	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0265	ug/L	106	(70-130)	30	1.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00209	ug/L	104	(50-150)		
MS2_202005280146	Perfluorononanoic acid (PFNA)	ND	0.05	0.0500	ug/L	100	(70-130)		
DUP_202005280429	Perfluorooctanesulfonic acid (PFOS)	0.0034		0.00339	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0242	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)	30	2.5

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00206	ug/L	111	(50-150)		
MS2_202005280146	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0464	ug/L	100	(70-130)		
DUP_202005280429	Perfluorooctanoic acid (PFOA)	0.0071		0.00716	ug/L		(0-30)	30	0.75
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0276	ug/L	110	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0265	ug/L	106	(70-130)	30	4.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00225	ug/L	112	(50-150)		
MS2_202005280146	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0521	ug/L	104	(70-130)		
DUP_202005280429	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0248	ug/L	99	(70-130)	30	0.80
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00185	ug/L	92	(50-150)		
MS2_202005280146	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0467	ug/L	93	(70-130)		
DUP_202005280429	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0242	ug/L	97	(70-130)	30	0.41
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00184	ug/L	92	(50-150)		
MS2_202005280146	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0457	ug/L	91	(70-130)		
DUP_202005280429	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0249	ug/L	100	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0244	ug/L	98	(70-130)	30	2.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00194	ug/L	97	(50-150)		
MS2_202005280146	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0482	ug/L	96	(70-130)		

Total Organic Carbon by SM 5310C

Analytical Batch: 1252401

Analysis Date: 06/01/2020

LCS1	Total Organic Carbon		5	4.81	mg/L	96	(90-110)		
LCS2	Total Organic Carbon		5	4.93	mg/L	99	(90-110)	20	2.5
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.230	mg/L	115	(50-150)		
MS_202005260448	Total Organic Carbon	0.77	4	4.62	mg/L	96	(80-120)		
MS2_202002160048	Total Organic Carbon	0.34	2	2.24	mg/L	95	(80-120)		
MSD_202005260448	Total Organic Carbon	0.77	4	4.65	mg/L	97	(80-120)	20	0.56
MSD2_202002160048	Total Organic Carbon	0.34	2	2.22	mg/L	94	(80-120)	20	0.94

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Total Organic Carbon by SM 5310C									
Analytical Batch: 1252402					Analysis Date: 06/02/2020				
LCS1	Total Organic Carbon		5	4.91	mg/L	98	(90-110)		
LCS2	Total Organic Carbon		5	4.94	mg/L	99	(90-110)	20	0.61
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.236	mg/L	118	(50-150)		
MS_202004160352	Total Organic Carbon	1.8	4	5.63	mg/L	96	(80-120)		
MSD_202004160352	Total Organic Carbon	1.8	4	5.68	mg/L	97	(80-120)	20	0.88
Hexavalent chromium(Dissolved) by EPA 218.6									
Analytical Batch: 1252533					Analysis Date: 06/02/2020				
LCS1	Hexavalent chromium(Dissolved)		2	1.99	ug/L	100	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	2.01	ug/L	100	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0211	ug/L	106	(50-150)		
MS_202005260448	Hexavalent chromium(Dissolved)	0.40	2	2.53	ug/L	106	(90-110)		
MSD_202005260448	Hexavalent chromium(Dissolved)	0.40	2	2.56	ug/L	108	(90-110)	20	1.1
Volatile Organics by GCMS by EPA 524.2									
Analytical Batch: 1253202					Analysis Date: 06/04/2020				
LCS1	1,1,1,2-Tetrachloroethane		5	5.14	ug/L	103	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.77	ug/L	95	(70-130)	20	7.5
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.63	ug/L	93	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.67	ug/L	93	(70-130)	20	0.86
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.430	ug/L	86	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	4.74	ug/L	95	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.94	ug/L	99	(70-130)	20	4.1
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.89	ug/L	98	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.17	ug/L	103	(70-130)	20	5.6
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,1-Dichloroethane		5	5.02	ug/L	100	(70-130)		
LCS2	1,1-Dichloroethane		5	4.82	ug/L	96	(70-130)	20	4.1

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.56	ug/L	91	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.79	ug/L	96	(70-130)	20	4.9
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.400	ug/L	80	(50-150)		
LCS1	1,1-Dichloropropene		5	4.30	ug/L	86	(70-130)		
LCS2	1,1-Dichloropropene		5	4.25	ug/L	85	(70-130)	20	1.2
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.400	ug/L	80	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.35	ug/L	87	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.92	ug/L	98	(70-130)	20	12
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.790	ug/L	<u>158</u>	(50-150)		
LCS1	1,2,3-Trichloropropane		5	4.93	ug/L	99	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.10	ug/L	102	(70-130)	20	3.4
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.50	ug/L	90	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.79	ug/L	96	(70-130)	20	6.2
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.600	ug/L	120	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.64	ug/L	93	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.24	ug/L	85	(70-130)	20	9.0
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,2-Dichloroethane		5	5.09	ug/L	102	(70-130)		
LCS2	1,2-Dichloroethane		5	5.26	ug/L	105	(70-130)	20	3.3
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			103	%	103	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
LCS1	1,2-Dichloropropane		5	5.01	ug/L	100	(70-130)		
LCS2	1,2-Dichloropropane		5	4.98	ug/L	100	(70-130)	20	0.60
MBLK	1,2-Dichloropropane			<0.5	ug/L				

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,2-Dichloropropane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.58	ug/L	92	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.06	ug/L	81	(70-130)	20	12
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.410	ug/L	82	(50-150)		
LCS1	1,3-Dichloropropane		5	5.00	ug/L	100	(70-130)		
LCS2	1,3-Dichloropropane		5	4.96	ug/L	99	(70-130)	20	0.80
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	2,2-Dichloropropane		5	4.73	ug/L	95	(70-130)		
LCS2	2,2-Dichloropropane		5	4.50	ug/L	90	(70-130)	20	5.0
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.450	ug/L	90	(50-150)		
LCS1	2-Butanone (MEK)		50	48.1	ug/L	96	(70-130)		
LCS2	2-Butanone (MEK)		50	52.6	ug/L	105	(70-130)	20	8.9
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.18	ug/L	104	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	96.6	%	97	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	95.0	%	95	(70-130)		
MBLK	4-Bromofluorobenzene (S)			93.0	%	93	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	98.2	%	98	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	94.0	%	94	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	51.4	ug/L	103	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	57.1	ug/L	114	(70-130)	20	11
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.65	ug/L	93	(50-150)		
LCS1	Benzene		5	4.99	ug/L	100	(70-130)		
LCS2	Benzene		5	4.86	ug/L	97	(70-130)	20	2.6
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Bromobenzene		5	4.88	ug/L	98	(70-130)		
LCS2	Bromobenzene		5	4.58	ug/L	92	(70-130)	20	6.3
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	Bromochloromethane		5	5.09	ug/L	102	(70-130)		
LCS2	Bromochloromethane		5	4.57	ug/L	91	(70-130)	20	11
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.600	ug/L	120	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Bromodichloromethane		5	5.23	ug/L	105	(70-130)		
LCS2	Bromodichloromethane		5	5.31	ug/L	106	(70-130)	20	1.5
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Bromoethane		5	4.89	ug/L	98	(70-130)		
LCS2	Bromoethane		5	4.51	ug/L	90	(70-130)	20	8.1
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromoform		5	5.74	ug/L	115	(70-130)		
LCS2	Bromoform		5	5.88	ug/L	118	(70-130)	20	2.4
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.590	ug/L	118	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.30	ug/L	106	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.09	ug/L	102	(70-130)	20	4.0
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.610	ug/L	122	(50-150)		
LCS1	Carbon disulfide		5	5.31	ug/L	106	(70-130)		
LCS2	Carbon disulfide		5	5.28	ug/L	106	(70-130)	20	0.57
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.490	ug/L	98	(50-150)		
LCS1	Carbon Tetrachloride		5	4.68	ug/L	94	(70-130)		
LCS2	Carbon Tetrachloride		5	4.50	ug/L	90	(70-130)	20	3.9
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.360	ug/L	72	(50-150)		
LCS1	Chlorobenzene		5	4.98	ug/L	100	(70-130)		
LCS2	Chlorobenzene		5	4.95	ug/L	99	(70-130)	20	0.60
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Chlorodibromomethane		5	5.61	ug/L	112	(70-130)		
LCS2	Chlorodibromomethane		5	5.82	ug/L	116	(70-130)	20	3.7
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	Chloroethane		5	4.89	ug/L	98	(70-130)		
LCS2	Chloroethane		5	4.97	ug/L	99	(70-130)	20	1.6
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.250	ug/L	50	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.98	ug/L	100	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.82	ug/L	96	(70-130)	20	3.3

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.500	ug/L	100	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	5.34	ug/L	107	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.45	ug/L	89	(70-130)	20	18
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.370	ug/L	74	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.62	ug/L	92	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.49	ug/L	90	(70-130)	20	2.9
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.500	ug/L	100	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	5.64	ug/L	113	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	5.78	ug/L	116	(70-130)	20	2.5
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.710	ug/L	142	(50-150)		
LCS1	Dibromomethane		5	4.88	ug/L	98	(70-130)		
LCS2	Dibromomethane		5	4.73	ug/L	95	(70-130)	20	3.1
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.90	ug/L	98	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.83	ug/L	97	(70-130)	20	1.4
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.360	ug/L	72	(50-150)		
LCS1	Dichloromethane		5	4.78	ug/L	96	(70-130)		
LCS2	Dichloromethane		5	4.80	ug/L	96	(70-130)	20	0.42
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Di-isopropyl ether		5	4.74	ug/L	95	(70-130)		
LCS2	Di-isopropyl ether		5	4.80	ug/L	96	(70-130)	20	1.3
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.520	ug/L	104	(50-150)		
LCS1	Ethyl benzene		5	4.83	ug/L	97	(70-130)		
LCS2	Ethyl benzene		5	4.64	ug/L	93	(70-130)	20	4.0
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	Hexachlorobutadiene		5	4.57	ug/L	91	(70-130)		
LCS2	Hexachlorobutadiene		5	4.91	ug/L	98	(70-130)	20	7.2
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.590	ug/L	118	(50-150)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Isopropylbenzene		5	4.58	ug/L	92	(70-130)		
LCS2	Isopropylbenzene		5	4.26	ug/L	85	(70-130)	20	7.2
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	m,p-Xylenes		10	9.77	ug/L	98	(70-130)		
LCS2	m,p-Xylenes		10	9.28	ug/L	93	(70-130)	20	5.1
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.830	ug/L	83	(50-150)		
MRL_W	m,p-Xylenes		0.5	0.450	ug/L	90	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.93	ug/L	99	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.68	ug/L	94	(70-130)	20	5.2
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.490	ug/L	98	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.09	ug/L	102	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.39	ug/L	108	(70-130)	20	5.7
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.540	ug/L	108	(50-150)		
LCS1	Naphthalene		5	4.25	ug/L	85	(70-130)		
LCS2	Naphthalene		5	5.07	ug/L	101	(70-130)	20	18
MBLK	Naphthalene			<u>0.500</u>	ug/L				
MRL_CHK	Naphthalene		0.5	0.970	ug/L	<u>194</u>	(50-150)		
LCS1	n-Butylbenzene		5	4.34	ug/L	87	(70-130)		
LCS2	n-Butylbenzene		5	4.23	ug/L	85	(70-130)	20	2.6
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	n-Propylbenzene		5	4.52	ug/L	90	(70-130)		
LCS2	n-Propylbenzene		5	4.22	ug/L	84	(70-130)	20	6.9
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.440	ug/L	88	(50-150)		
LCS1	o-Chlorotoluene		5	4.72	ug/L	94	(70-130)		
LCS2	o-Chlorotoluene		5	4.70	ug/L	94	(70-130)	20	0.43
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.480	ug/L	96	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.90	ug/L	98	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.89	ug/L	98	(70-130)	20	0.20
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.540	ug/L	108	(50-150)		
LCS1	o-Xylene		5	4.83	ug/L	97	(70-130)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 872940
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	o-Xylene		5	4.72	ug/L	94	(70-130)	20	2.3
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.420	ug/L	84	(50-150)		
LCS1	p-Chlorotoluene		5	4.83	ug/L	97	(70-130)		
LCS2	p-Chlorotoluene		5	4.63	ug/L	93	(70-130)	20	4.2
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.460	ug/L	92	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.73	ug/L	95	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	4.58	ug/L	92	(70-130)	20	3.2
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.550	ug/L	110	(50-150)		
LCS1	p-Isopropyltoluene		5	4.54	ug/L	91	(70-130)		
LCS2	p-Isopropyltoluene		5	4.24	ug/L	85	(70-130)	20	6.8
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.370	ug/L	74	(50-150)		
LCS1	sec-Butylbenzene		5	4.81	ug/L	96	(70-130)		
LCS2	sec-Butylbenzene		5	4.45	ug/L	89	(70-130)	20	7.8
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Styrene		5	4.88	ug/L	98	(70-130)		
LCS2	Styrene		5	4.53	ug/L	91	(70-130)	20	7.4
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.410	ug/L	82	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.57	ug/L	91	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.92	ug/L	98	(70-130)	20	7.4
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.350	ug/L	70	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.94	ug/L	99	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.90	ug/L	98	(70-130)	20	0.81
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.460	ug/L	92	(50-150)		
LCS1	tert-Butylbenzene		5	4.47	ug/L	89	(70-130)		
LCS2	tert-Butylbenzene		5	4.25	ug/L	85	(70-130)	20	5.0
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.400	ug/L	80	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.64	ug/L	93	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.39	ug/L	88	(70-130)	20	5.5
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 872940
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.430	ug/L	86	(50-150)		
LCS1	Toluene		5	4.91	ug/L	98	(70-130)		
LCS2	Toluene		5	4.77	ug/L	95	(70-130)	20	2.9
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.440	ug/L	88	(50-150)		
LCS1	Toluene-d8 (S)		5	105	%	105	(70-130)		
LCS2	Toluene-d8 (S)		5	109	%	109	(70-130)		
MBLK	Toluene-d8 (S)			98.6	%	99	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	102	%	102	(70-130)		
MRLLLW	Toluene-d8 (S)		5	96.4	%	96	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	5.09	ug/L	102	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.93	ug/L	99	(70-130)	20	3.2
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.480	ug/L	96	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	5.46	ug/L	109	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	5.71	ug/L	114	(70-130)	20	4.5
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.710	ug/L	142	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.77	ug/L	95	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.82	ug/L	96	(70-130)	20	1.0
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.480	ug/L	96	(50-150)		
LCS1	Trichlorofluoromethane		5	4.09	ug/L	82	(70-130)		
LCS2	Trichlorofluoromethane		5	4.09	ug/L	82	(70-130)	20	0.0
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.370	ug/L	74	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.50	ug/L	90	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.60	ug/L	92	(70-130)	20	2.2
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.400	ug/L	80	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.94	ug/L	99	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.81	ug/L	96	(70-130)	20	2.7
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.440	ug/L	88	(50-150)		
MRLLLW	Vinyl chloride (VC)		0.25	0.280	ug/L	112	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Fecal Coliform Small, Fecal Coliform Large), MPN/100 mL (Fecal Coliform), Presence/Absence (P/A)* (Fecal Coliform)

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 06/06/2020

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
Comment: _____
Approved by: _____

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 06/06/2020

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____

Project: _____
 Phone #: _____
 Date Received: _____
 Sampled By: _____
 Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
 P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 06/06/2020

Quant Report - Page 1 of 1

, Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-29198-1
Client Project/Site: 872940

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
5/29/2020 8:52:10 AM

Lori Thompson, Project Manager I
(714)895-5494
lorithompson@eurofinsus.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 872940

Job ID: 570-29198-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 872940

Job ID: 570-29198-1

Job ID: 570-29198-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-29198-1

Comments

No additional comments.

Receipt

The samples were received on 5/27/2020 11:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-71847. LCS/LCSD was performed to meet QC requirement.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 872940

Job ID: 570-29198-1

Client Sample ID: 202005260438

Lab Sample ID: 570-29198-1

No Detections.

Client Sample ID: 202005260448

Lab Sample ID: 570-29198-2

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 872940

Job ID: 570-29198-1

General Chemistry

Client Sample ID: 202005260438

Date Collected: 05/26/20 09:36

Date Received: 05/27/20 11:47

Lab Sample ID: 570-29198-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.959	0.767	mg/L		05/28/20 09:49	05/28/20 09:49	1

Client Sample ID: 202005260448

Date Collected: 05/26/20 11:36

Date Received: 05/27/20 11:47

Lab Sample ID: 570-29198-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.953	0.762	mg/L		05/28/20 09:49	05/28/20 09:49	1

QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 872940

Job ID: 570-29198-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-71847/1-A
Matrix: Water
Analysis Batch: 71883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 71847

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		05/28/20 09:49	05/28/20 09:49	1

Lab Sample ID: LCS 570-71847/2-A
Matrix: Water
Analysis Batch: 71883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 71847

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	36.40		mg/L		91	78 - 114

Lab Sample ID: LCSD 570-71847/3-A
Matrix: Water
Analysis Batch: 71883

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 71847

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.50		mg/L		91	78 - 114	0	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 872940

Job ID: 570-29198-1

General Chemistry

Prep Batch: 71847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-29198-1	202005260438	Total/NA	Water	1664A	
570-29198-2	202005260448	Total/NA	Water	1664A	
MB 570-71847/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-71847/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-71847/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 71883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-29198-1	202005260438	Total/NA	Water	1664A	71847
570-29198-2	202005260448	Total/NA	Water	1664A	71847
MB 570-71847/1-A	Method Blank	Total/NA	Water	1664A	71847
LCS 570-71847/2-A	Lab Control Sample	Total/NA	Water	1664A	71847
LCSD 570-71847/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	71847

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 872940

Job ID: 570-29198-1

Client Sample ID: 202005260438

Lab Sample ID: 570-29198-1

Date Collected: 05/26/20 09:36

Matrix: Water

Date Received: 05/27/20 11:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1043 mL	1000 mL	71847	05/28/20 09:49	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			71883	05/28/20 09:49	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: 202005260448

Lab Sample ID: 570-29198-2

Date Collected: 05/26/20 11:36

Matrix: Water

Date Received: 05/27/20 11:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1049 mL	1000 mL	71847	05/28/20 09:49	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			71883	05/28/20 09:49	UWEZ	ECL 1
Instrument ID: NOEQUIP										

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 872940

Job ID: 570-29198-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 872940

Job ID: 570-29198-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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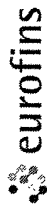
Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 872940

Job ID: 570-29198-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-29198-1	202005260438	Water	05/26/20 09:36	05/27/20 11:47	
570-29198-2	202005260448	Water	05/26/20 11:36	05/27/20 11:47	

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Eaton Analytical

Ship To:
Eurofins CalScience
7440 Lincoln Way

Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 872940 Report Due: 06/09/2020

Sample ID: 202005260438 Client Sample ID for reference onl
LH-INF-20200526

Sample type: Sample Event: Analysis Requested

Method: EPA 1664

Prep Method: Oil and Grease by 1664(subbed)

Sample ID: 202005260448 Client Sample ID for reference onl
MB-INF-20200526

Sample type: Sample Event: Analysis Requested

Method: EPA 1664

Prep Method: Oil and Grease by 1664(subbed)

29198

Submittal Form

*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!
Report & Invoice must have the Folder # 872940 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.
Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator

EMAIL TO: us20_subcontract@eurofins.com

Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016

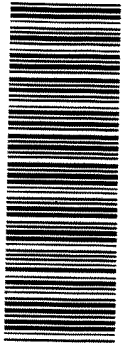
Phone (626) 386-1165 Fax (626) 386-1122

Invoices to: Eurofins Eaton Analytical, LLC

Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the
Specified State Certification # and
Exp Date for requested tests + matrix.

Samples from: CALIFORNIA



570-29198 Chain of Custody

Sample Date & Time Matrix PWS Systemcode PWSID JLS
05/26/20 0936 DW

Facility ID: Sample Point ID: Static ID:

Sample Date & Time Matrix PWS Systemcode PWSID JLS
05/26/20 1136 DW

Facility ID: Sample Point ID: Static ID:

Relinquished by: *[Signature]* Sample Control Date: 5/27/20 Time: 1147

Received by: *[Signature]* Sample Control Date: 5/27/20 Time: 1147

Relinquished by: Date: Time:

Received by: Date: Time:

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

2-0/2-2-506

Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-29198-1

Login Number: 29198

List Source: Eurofins Calscience

List Number: 1

Creator: Ramos, Maribel

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 874079
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report,

Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 874079
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **June 02, 2020 at 1250**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202006020423</u>	GAC-1-20200602	06/02/2020 0832
	@537.1	
<u>202006020424</u>	GAC-2-20200602	06/02/2020 0835
	Static ID: 537.1	
	@537.1	
<u>202006020425</u>	GAC-3-20200602	06/02/2020 0838
	@537.1	
<u>202006020426</u>	GAC-4-20200602	06/02/2020 0841
	@537.1	
<u>202006020427</u>	IX-1-20200602	06/02/2020 0844
	@537.1	
<u>202006020428</u>	IX-2-20200602	06/02/2020 0847
	@537.1	
<u>202006020429</u>	IX-3-20200602	06/02/2020 0850
	@537.1	
<u>202006020430</u>	IX-4-20200602	06/02/2020 0853
	@537.1	
<u>202006020431</u>	LH-INF-20200602	06/02/2020 0856
	@537.1	
	Chloride	@ANIONS48
		Sulfate
		Alkalinity in CaCO3 units
		Total Organic Carbon
<u>202006020432</u>	GAC-5-20200602	06/02/2020 1012
	@537.1	
<u>202006020433</u>	GAC-6-20200602	06/02/2020 1015
	@537.1	
<u>202006020434</u>	GAC-7-20200602	06/02/2020 1018
	@537.1	
<u>202006020435</u>	GAC-8-20200602	06/02/2020 1021

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 874079
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **June 02, 2020 at 1250**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202006020436	IX-5-20200602	06/02/2020 1024
	@537.1	
202006020437	IX-6-20200602	06/02/2020 1027
	@537.1	
202006020438	IX-7-20200602	06/02/2020 1030
	@537.1	
202006020439	IX-8-20200602	06/02/2020 1033
	@537.1	
202006020440	MB-INF-20200602	06/02/2020 1036
	@537.1	
	Chloride	@ANIONS48 Sulfate
		Alkalinity in CaCO3 units Total Organic Carbon
202006020441	FB-20200602	06/02/2020 1040
	@537.1 FB	

Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0

874074

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302								
LABORATORY: Eurofins Eaton Analytical		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang								
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		SAMPLER(S): (PRINT) PDT								
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.										
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdorres@gsi-net.com; Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1-20200602	6-2-20	0832	Water	2		X		X			
	GAC-2-20200602		0835	Water	2		X		X			
	GAC-3-20200602		0838	Water	2		X		X			
	GAC-4-20200602		0841	Water	2		X		X			
	IX-1-20200602		0844	Water	2		X		X			
	IX-2-20200602		0847	Water	2		X		X			
	IX-3-20200602		0850	Water	2		X		X			
	IX-4-20200602		0853	Water	2		X		X			
	LH-INF-20200602		0856	Water	5		X		X			
	LH-INF-DUP			Water								
	GAC-5-20200602	6-2-20	1012	Water	2				X			
	GAC-6-20200602		1015	Water	2				X			
	GAC-7-20200602		1018	Water	2				X			
	GAC-8-20200602		1021	Water	2				X			
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 6-2-20		Time: 12:50						
Relinquished by: (Signature)		Received by: (Signature)		Date: 6/2/20		Time:						
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:						



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 81084

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 608A (Observation = 10.5 °C) (Corr. Factor = 2 °C) (Final = 10.3 °C)

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
	<u>W</u>	Eurofins Eaton Analytical	<u>6/2/20</u>	<u>12:52</u>

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 874079
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202006020431	<u>LH-INF-20200602</u>			
06/04/2020 18:57	Alkalinity in CaCO3 units		200		mg/L	2.0
06/02/2020 17:18	Chloride		100	250	mg/L	2.5
06/02/2020 17:18	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
06/02/2020 17:18	Nitrate as NO3 (calc)		12	45	mg/L	2.2
06/05/2020 16:28	Perfluorobutanesulfonic acid (PFBS)		0.0061		ug/L	0.0020
06/05/2020 16:28	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
06/05/2020 16:28	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
06/05/2020 16:28	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
06/05/2020 16:28	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
06/05/2020 16:28	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
06/02/2020 17:18	Sulfate		170	250	mg/L	2.5
06/02/2020 17:18	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
06/06/2020 06:23	Total Organic Carbon		0.60		mg/L	0.30
		202006020440	<u>MB-INF-20200602</u>			
06/04/2020 17:03	Alkalinity in CaCO3 units		170		mg/L	2.0
06/02/2020 17:05	Chloride		52	250	mg/L	2.5
06/02/2020 17:05	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
06/02/2020 17:05	Nitrate as NO3 (calc)		10	45	mg/L	2.2
06/05/2020 18:06	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
06/05/2020 18:06	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
06/05/2020 18:06	Perfluoroheptanoic acid (PFHpA)		0.0031		ug/L	0.0020
06/05/2020 18:06	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
06/05/2020 18:06	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
06/05/2020 18:06	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
06/05/2020 18:06	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
06/05/2020 18:06	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
06/02/2020 17:05	Sulfate		78	250	mg/L	2.5
06/02/2020 17:05	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
06/06/2020 06:40	Total Organic Carbon		0.76		mg/L	0.30

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200602 (202006020423)					Sampled on 06/02/2020 0832				
EPA 537.1 - EPA Method 537.1									
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	13C2-PFDA	120	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	13C2-PFHxA	121	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	13C3-HFPO-DA	118	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	d3-NMeFOSAA	98	%		1
06/03/20	06/04/20 16:42	1252582	1253213	(EPA 537.1)	d5-NEtFOSAA	118	%		1

GAC-2-20200602 (202006020424)

Sampled on 06/02/2020 0835

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	13C2-PFDA	125	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	13C2-PFHxA	122	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	13C3-HFPO-DA	116	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	13C4-PFOS- IS#2	89	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	d3-NMeFOSAA	97	%		1
06/03/20	06/04/20 16:52	1252582	1253213	(EPA 537.1)	d5-NEtFOSAA	119	%		1

GAC-3-20200602 (202006020425)

Sampled on 06/02/2020 0838

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	13C2-PFDA	114	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	13C2-PFHxA	113	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	110	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	107	%		1
06/03/20	06/05/20 14:42	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	109	%		1

GAC-4-20200602 (202006020426)

Sampled on 06/02/2020 0841

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	13C2-PFDA	111	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	13C2-PFHxA	116	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	112	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	107	%		1
06/03/20	06/05/20 15:40	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	113	%		1

IX-1-20200602 (202006020427)

Sampled on 06/02/2020 0844

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	13C2-PFDA	111	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	13C2-PFHxA	110	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	110	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	108	%		1
06/03/20	06/05/20 15:49	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	112	%		1

IX-2-20200602 (202006020428)

Sampled on 06/02/2020 0847

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	13C2-PFDA	117	%		1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	13C2-PFHxA	120	%		1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	116	%		1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	108	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 15:59	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	112	%		1

IX-3-20200602 (202006020429)

Sampled on 06/02/2020 0850

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	13C2-PFDA	112	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	13C2-PFHxA	111	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	108	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	105	%		1
06/03/20	06/05/20 16:08	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	111	%		1

IX-4-20200602 (202006020430)

Sampled on 06/02/2020 0853

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	13C2-PFDA	114	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	13C2-PFHxA	113	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	112	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	105	%		1
06/03/20	06/05/20 16:18	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	114	%		1

LH-INF-20200602 (202006020431)

Sampled on 06/02/2020 0856

SM 5310C - Total Organic Carbon

06/06/20 06:23	1253691	(SM 5310C)	Total Organic Carbon	0.60	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

06/02/20 17:18	1252476	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
06/02/20 17:18	1252476	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
06/02/20 17:18	1252476	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
06/02/20 17:18	1252476	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

06/02/20 17:18	1252524	(EPA 300.0)	Chloride	100	mg/L	2.5	5
06/02/20 17:18	1252524	(EPA 300.0)	Sulfate	170	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

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Tel: (626) 386-1100
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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0061	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	13C2-PFDA	108	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	13C2-PFHxA	109	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	107	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	110	%		1
06/03/20	06/05/20 16:28	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	105	%		1

SM 2320B - Alkalinity in CaCO3 units

06/04/20 18:57	1253020	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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GAC-5-20200602 (202006020432)

Sampled on 06/02/2020 1012

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	13C2-PFDA	105	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	13C2-PFHxA	115	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	114	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	105	%		1
06/03/20	06/05/20 16:48	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	110	%		1

GAC-6-20200602 (202006020433)

Sampled on 06/02/2020 1015

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	13C2-PFDA	111	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	13C2-PFHxA	114	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	116	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	104	%		1
06/03/20	06/05/20 16:59	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	112	%		1

GAC-7-20200602 (202006020434)

Sampled on 06/02/2020 1018

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	13C2-PFDA	110	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	13C2-PFHxA	110	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	110	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	108	%		1
06/03/20	06/05/20 17:08	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	105	%		1

GAC-8-20200602 (202006020435)

Sampled on 06/02/2020 1021

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	13C2-PFDA	109	%		1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	13C2-PFHxA	115	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	112	%		1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	103	%		1
06/03/20	06/05/20 17:18	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	111	%		1

IX-5-20200602 (202006020436)

Sampled on 06/02/2020 1024

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	13C2-PFDA	114	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	13C2-PFHxA	111	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	113	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	106	%		1
06/03/20	06/05/20 17:28	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	111	%		1

IX-6-20200602 (202006020437)

Sampled on 06/02/2020 1027

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	13C2-PFDA	120	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	13C2-PFHxA	116	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	117	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	104	%		1
06/03/20	06/05/20 17:37	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	117	%		1

IX-7-20200602 (202006020438)

Sampled on 06/02/2020 1030

EPA 537.1 - EPA Method 537.1									
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	13C2-PFDA	117	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	13C2-PFHxA	117	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	117	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	106	%		1
06/03/20	06/05/20 17:47	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	110	%		1

IX-8-20200602 (202006020439)

Sampled on 06/02/2020 1033

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	13C2-PFDA	118	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	13C2-PFHxA	117	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	118	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	104	%		1
06/03/20	06/05/20 17:56	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	113	%		1

MB-INF-20200602 (202006020440)

Sampled on 06/02/2020 1036

SM 5310C - Total Organic Carbon

06/06/20 06:40	1253691	(SM 5310C)	Total Organic Carbon	0.76	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

06/02/20 17:05	1252476	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
06/02/20 17:05	1252476	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
06/02/20 17:05	1252476	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
06/02/20 17:05	1252476	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

06/02/20 17:05	1252524	(EPA 300.0)	Chloride	52	mg/L	2.5	5
06/02/20 17:05	1252524	(EPA 300.0)	Sulfate	78	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0031	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	13C2-PFDA	111	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	13C2-PFHxA	104	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	13C3-HFPO-DA	99	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	d3-NMeFOSAA	117	%		1
06/03/20	06/05/20 18:06	1252652	1253658	(EPA 537.1)	d5-NEtFOSAA	101	%		1

SM 2320B - Alkalinity in CaCO3 units

06/04/20 17:03		1253020	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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FB-20200602 (202006020441)

Sampled on 06/02/2020 1040

EPA 537.1 - EPA Method 537.1

06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/02/2020 1250

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	13C2-PFDA	94	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	13C2-PFHxA	102	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	13C3-HFPO-DA	92	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	d3-NMeFOSAA	109	%		1
06/10/20	06/11/20 15:05	1254164	1254828	(EPA 537.1)	d5-NEtFOSAA	96	%		1

Rounding on totals after summation.
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Report: 874079
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0
Analytical Batch: 1252476

202006020431	LH-INF-20200602
202006020440	MB-INF-20200602

Analysis Date: 06/02/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0
Analytical Batch: 1252524

202006020431	LH-INF-20200602
202006020440	MB-INF-20200602

Analysis Date: 06/02/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Alkalinity in CaCO3 units
Analytical Batch: 1253020

202006020431	LH-INF-20200602
202006020440	MB-INF-20200602

Analysis Date: 06/04/2020

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

EPA Method 537.1
Prep Batch: 1252582 Analytical Batch: 1253213

202006020423	GAC-1-20200602
202006020424	GAC-2-20200602

Analysis Date: 06/04/2020

Analyzed by: KAM
 Analyzed by: KAM

EPA Method 537.1
Prep Batch: 1252652 Analytical Batch: 1253658

202006020425	GAC-3-20200602
202006020426	GAC-4-20200602
202006020427	IX-1-20200602
202006020428	IX-2-20200602
202006020429	IX-3-20200602
202006020430	IX-4-20200602
202006020431	LH-INF-20200602
202006020432	GAC-5-20200602
202006020433	GAC-6-20200602
202006020434	GAC-7-20200602
202006020435	GAC-8-20200602
202006020436	IX-5-20200602
202006020437	IX-6-20200602
202006020438	IX-7-20200602
202006020439	IX-8-20200602
202006020440	MB-INF-20200602

Analysis Date: 06/05/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
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 Analyzed by: KAM
 Analyzed by: KAM

Total Organic Carbon
Analytical Batch: 1253691

202006020431	LH-INF-20200602
202006020440	MB-INF-20200602

Analysis Date: 06/06/2020

Analyzed by: ZS6I
 Analyzed by: ZS6I

EPA Method 537.1
Prep Batch: 1254164 Analytical Batch: 1254828

202006020441	FB-20200602
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Analysis Date: 06/11/2020

Analyzed by: KAM

Tel: (626) 386-1100
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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1252476					Analysis Date: 06/02/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.56	mg/L	102	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.53	mg/L	101	(90-110)	20	1.2
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0502	mg/L	100	(50-150)		
MS_202006020197	Nitrate as Nitrogen by IC	5.3	1.3	6.59	mg/L	105	(80-120)		
MS_202006020431	Nitrate as Nitrogen by IC	2.8	6.5	9.44	mg/L	107	(80-120)		
MSD_202006020197	Nitrate as Nitrogen by IC	5.3	1.3	6.59	mg/L	105	(80-120)	20	0.026
MSD_202006020431	Nitrate as Nitrogen by IC	2.8	6.5	9.47	mg/L	107	(80-120)	20	0.36
LCS1	Nitrite Nitrogen by IC		1	0.987	mg/L	99	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.982	mg/L	98	(90-110)	20	0.51
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0405	mg/L	81	(50-150)		
MS_202006020197	Nitrite Nitrogen by IC	ND	0.5	0.506	mg/L	101	(80-120)		
MS_202006020431	Nitrite Nitrogen by IC	ND	2.5	2.43	mg/L	97	(80-120)		
MSD_202006020197	Nitrite Nitrogen by IC	ND	0.5	0.506	mg/L	101	(80-120)	20	0.020
MSD_202006020431	Nitrite Nitrogen by IC	ND	2.5	2.44	mg/L	98	(80-120)	20	0.52
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1252524					Analysis Date: 06/02/2020				
LCS1	Chloride		25	26.0	mg/L	104	(90-110)		
LCS2	Chloride		25	25.7	mg/L	103	(90-110)	20	1.2
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.440	mg/L	88	(50-150)		
MS_202006020431	Chloride	100	65	173	mg/L	110	(80-120)		
MSD_202006020431	Chloride	100	65	174	mg/L	110	(80-120)	20	0.32
LCS1	Sulfate		50	51.3	mg/L	103	(90-110)		
LCS2	Sulfate		50	50.8	mg/L	102	(90-110)	20	0.98
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.958	mg/L	96	(50-150)		
MRLLLW	Sulfate		0.25	0.242	mg/L	97	(50-150)		
MS_202006020431	Sulfate	170	125	306	mg/L	109	(80-120)		
MSD_202006020431	Sulfate	170	125	307	mg/L	109	(80-120)	20	0.33
Alkalinity in CaCO3 units by SM 2320B									
Analytical Batch: 1253020					Analysis Date: 06/04/2020				
LCS1	Alkalinity in CaCO3 units		100	99.3	mg/L	99	(90-110)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)	20	0.30
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.00	mg/L	100	(50-150)		
MS_202006030195	Alkalinity in CaCO3 units	120	100	165	mg/L	44	(80-120)		
MS_202006030197	Alkalinity in CaCO3 units	71	100	176	mg/L	105	(80-120)		
MSD_202006030195	Alkalinity in CaCO3 units	120	100	160	mg/L	39	(80-120)	20	3.0
MSD_202006030197	Alkalinity in CaCO3 units	71	100	175	mg/L	104	(80-120)	20	0.45

EPA Method 537.1 by EPA 537.1

Prep Batch: 1252582 Analytical Batch: 1253213

Analysis Date: 06/04/2020

DUP_202006020305	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0259	ug/L	110	(70-130)	30	9.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00200	ug/L	106	(50-150)		
MS1_202006020303	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0244	ug/L	104	(70-130)		
DUP_202006020305	13C2-PFDA (S)			116	%	116	(70-130)		
LCS1	13C2-PFDA (S)		100	118	%	118	(70-130)		
LCS2	13C2-PFDA (S)		100	116	%	116	(70-130)		
MBLK	13C2-PFDA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	108	%	109	(70-130)		
MS1_202006020303	13C2-PFDA (S)		100	109	%	109	(70-130)		
DUP_202006020305	13C2-PFHxA (S)			122	%	122	(70-130)		
LCS1	13C2-PFHxA (S)		100	123	%	123	(70-130)		
LCS2	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MBLK	13C2-PFHxA (S)			117	%	117	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	97.7	%	98	(70-130)		
MS1_202006020303	13C2-PFHxA (S)		100	119	%	119	(70-130)		
DUP_202006020305	13C2-PFOA- IS#1 (I)			91.9	%	92	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	90.5	%	90	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	90.8	%	91	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			93.9	%	94	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	95.4	%	95	(50-150)		
MS1_202006020303	13C2-PFOA- IS#1 (I)		100	91.3	%	91	(50-150)		
DUP_202006020305	13C3-HFPO-DA (S)			117	%	117	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	118	%	118	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	111	%	111	(70-130)		
MBLK	13C3-HFPO-DA (S)			113	%	113	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C3-HFPO-DA (S)		100	84.7	%	85	(70-130)		
MS1_202006020303	13C3-HFPO-DA (S)		100	115	%	115	(70-130)		
DUP_202006020305	13C4-PFOS- IS#2 (I)			86.1	%	86	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	88.3	%	88	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	86.6	%	87	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			88.0	%	88	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	88.0	%	88	(50-150)		
MS1_202006020303	13C4-PFOS- IS#2 (I)		100	87.5	%	87	(50-150)		
DUP_202006020305	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0276	ug/L	117	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0268	ug/L	113	(70-130)	30	2.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00191	ug/L	101	(50-150)		
MS1_202006020303	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0271	ug/L	115	(70-130)		
DUP_202006020305	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0251	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0256	ug/L	110	(70-130)	30	2.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00196	ug/L	106	(50-150)		
MS1_202006020303	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0240	ug/L	103	(70-130)		
DUP_202006020305	d3-NMeFOSAA (I)			88.1	%	88	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	85.7	%	86	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	86.3	%	86	(50-150)		
MBLK	d3-NMeFOSAA (I)			84.5	%	84	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	88.8	%	89	(50-150)		
MS1_202006020303	d3-NMeFOSAA (I)		100	86.6	%	87	(50-150)		
DUP_202006020305	d5-NEtFOSAA (S)			113	%	113	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	113	%	113	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MBLK	d5-NEtFOSAA (S)			117	%	117	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
MS1_202006020303	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
DUP_202006020305	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0273	ug/L	109	(70-130)	30	3.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00161	ug/L	81	(50-150)		
MS1_202006020303	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0270	ug/L	108	(70-130)		

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Report: 874079
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006020305	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0269	ug/L	108	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0276	ug/L	111	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00208	ug/L	104	(50-150)		
MS1_202006020303	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202006020305	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0271	ug/L	108	(70-130)	30	1.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00218	ug/L	109	(50-150)		
MS1_202006020303	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0254	ug/L	102	(70-130)		
DUP_202006020305	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0256	ug/L	115	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0258	ug/L	116	(70-130)	30	0.78
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00196	ug/L	111	(50-150)		
MS1_202006020303	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0252	ug/L	113	(70-130)		
DUP_202006020305	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0274	ug/L	110	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0281	ug/L	112	(70-130)	30	2.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202006020303	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0268	ug/L	107	(70-130)		
DUP_202006020305	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0264	ug/L	106	(70-130)	30	4.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00203	ug/L	101	(50-150)		
MS1_202006020303	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0256	ug/L	102	(70-130)		
DUP_202006020305	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0301	ug/L	120	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0303	ug/L	121	(70-130)	30	0.66
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202006020303	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0304	ug/L	121	(70-130)		
DUP_202006020305	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0273	ug/L	120	(70-130)		

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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0275	ug/L	121	(70-130)	30	0.73
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS1_202006020303	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0274	ug/L	118	(70-130)		
DUP_202006020305	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0297	ug/L	119	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0287	ug/L	115	(70-130)	30	3.4
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00196	ug/L	98	(50-150)		
MS1_202006020303	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0285	ug/L	113	(70-130)		
DUP_202006020305	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0276	ug/L	111	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0292	ug/L	117	(70-130)	30	5.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00222	ug/L	111	(50-150)		
MS1_202006020303	Perfluorononanoic acid (PFNA)	ND	0.025	0.0278	ug/L	111	(70-130)		
DUP_202006020305	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0262	ug/L	113	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0265	ug/L	115	(70-130)	30	1.1
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00202	ug/L	109	(50-150)		
MS1_202006020303	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0250	ug/L	107	(70-130)		
DUP_202006020305	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0293	ug/L	117	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0289	ug/L	116	(70-130)	30	1.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00242	ug/L	121	(50-150)		
MS1_202006020303	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0293	ug/L	116	(70-130)		
DUP_202006020305	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0284	ug/L	114	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0298	ug/L	119	(70-130)	30	4.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00230	ug/L	115	(50-150)		
MS1_202006020303	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0284	ug/L	113	(70-130)		
DUP_202006020305	Perfluorotridecanoic acid (PFTTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTTrDA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTTrDA)		0.025	0.0269	ug/L	108	(70-130)	30	5.3
MBLK	Perfluorotridecanoic acid (PFTTrDA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 874079
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	101	(50-150)		
MS1_202006020303	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202006020305	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0258	ug/L	103	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0260	ug/L	104	(70-130)	30	1.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00198	ug/L	99	(50-150)		
MS1_202006020303	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0260	ug/L	104	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1252652 Analytical Batch: 1253658

Analysis Date: 06/05/2020

DUP_202006020551	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0489	ug/L	104	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)	30	0.21
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00189	ug/L	101	(50-150)		
MS_202006020425	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00182	ug/L	97	(50-150)		
DUP_202006020551	13C2-PFDA (S)			120	%	120	(70-130)		
LCS3	13C2-PFDA (S)		100	117	%	117	(70-130)		
LCS4	13C2-PFDA (S)		100	112	%	112	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	109	%	109	(70-130)		
MS_202006020425	13C2-PFDA (S)		100	116	%	116	(70-130)		
DUP_202006020551	13C2-PFHxA (S)			122	%	122	(70-130)		
LCS3	13C2-PFHxA (S)		100	117	%	117	(70-130)		
LCS4	13C2-PFHxA (S)		100	117	%	117	(70-130)		
MBLK	13C2-PFHxA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MS_202006020425	13C2-PFHxA (S)		100	118	%	118	(70-130)		
DUP_202006020551	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.0	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	98.1	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			105	%	105	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MS_202006020425	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202006020551	13C3-HFPO-DA (S)			119	%	119	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	117	%	117	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	119	%	119	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C3-HFPO-DA (S)			105	%	105	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MS_202006020425	13C3-HFPO-DA (S)		100	114	%	114	(70-130)		
DUP_202006020551	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.4	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	100	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.2	%	99	(50-150)		
MS_202006020425	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
DUP_202006020551	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0504	ug/L	104	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0508	ug/L	105	(70-130)	30	0.59
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00188	ug/L	99	(50-150)		
MS_202006020425	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00196	ug/L	104	(50-150)		
DUP_202006020551	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0497	ug/L	107	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0485	ug/L	104	(70-130)	30	2.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00191	ug/L	103	(50-150)		
MS_202006020425	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00183	ug/L	99	(50-150)		
DUP_202006020551	d3-NMeFOSAA (I)			107	%	107	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MS_202006020425	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
DUP_202006020551	d5-NEtFOSAA (S)			113	%	113	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MBLK	d5-NEtFOSAA (S)			105	%	105	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
MS_202006020425	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
DUP_202006020551	Hexafluoropropylene oxide dimer acid (HFPO-DA)			ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0516	ug/L	103	(70-130)	30	3.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00192	ug/L	96	(50-150)		

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 (S) - Indicates surrogate compound.
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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202006020425	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00192	ug/L	96	(50-150)		
DUP_202006020551	N-ethyl Perfluorooctanesulfonamidoacetic acid			ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0511	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0495	ug/L	99	(70-130)	30	3.2
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00198	ug/L	99	(50-150)		
MS_202006020425	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00202	ug/L	101	(50-150)		
DUP_202006020551	N-methyl Perfluorooctanesulfonamidoacetic acid			ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0525	ug/L	105	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0507	ug/L	101	(70-130)	30	3.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	105	(50-150)		
MS_202006020425	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00195	ug/L	97	(50-150)		
DUP_202006020551	Perfluorobutanesulfonic acid (PFBS)			ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0480	ug/L	109	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0479	ug/L	108	(70-130)	30	0.21
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00184	ug/L	104	(50-150)		
MS_202006020425	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00188	ug/L	106	(50-150)		
DUP_202006020551	Perfluorodecanoic acid (PFDA)			ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0540	ug/L	108	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0538	ug/L	108	(70-130)	30	0.37
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00198	ug/L	99	(50-150)		
MS_202006020425	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202006020551	Perfluorododecanoic acid (PFDoA)			ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0541	ug/L	108	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0528	ug/L	106	(70-130)	30	2.4
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00202	ug/L	101	(50-150)		
MS_202006020425	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00207	ug/L	103	(50-150)		
DUP_202006020551	Perfluoroheptanoic acid (PFHpA)			ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0558	ug/L	112	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0547	ug/L	109	(70-130)	30	2.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202006020425	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00217	ug/L	108	(50-150)		
DUP_202006020551	Perfluorohexanesulfonic acid (PFHxS)			ND	ug/L		(0-30)		

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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0491	ug/L	108	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0498	ug/L	109	(70-130)	30	1.4
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00191	ug/L	105	(50-150)		
MS_202006020425	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00194	ug/L	107	(50-150)		
DUP_202006020551	Perfluorohexanoic acid (PFHxA)			ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0558	ug/L	112	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0543	ug/L	109	(70-130)	30	2.7
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00205	ug/L	103	(50-150)		
MS_202006020425	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00226	ug/L	109	(50-150)		
DUP_202006020551	Perfluorononanoic acid (PFNA)			ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0547	ug/L	109	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0536	ug/L	107	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00208	ug/L	104	(50-150)		
MS_202006020425	Perfluorononanoic acid (PFNA)	ND	0.002	0.00203	ug/L	102	(50-150)		
DUP_202006020551	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0494	ug/L	107	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0503	ug/L	109	(70-130)	30	1.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00183	ug/L	99	(50-150)		
MS_202006020425	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00201	ug/L	104	(50-150)		
DUP_202006020551	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0552	ug/L	111	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0550	ug/L	110	(70-130)	30	0.54
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00216	ug/L	108	(50-150)		
MS_202006020425	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00221	ug/L	104	(50-150)		
DUP_202006020551	Perfluorotetradecanoic acid (PFTA)			ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0592	ug/L	118	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0570	ug/L	114	(70-130)	30	3.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202006020425	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00231	ug/L	104	(50-150)		
DUP_202006020551	Perfluorotridecanoic acid (PFTTrDA)			ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTTrDA)		0.05	0.0539	ug/L	108	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTTrDA)		0.05	0.0539	ug/L	108	(70-130)	30	0.0

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00195	ug/L	98	(50-150)		
MS_202006020425	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00202	ug/L	101	(50-150)		
DUP_202006020551	Perfluoroundecanoic acid (PFUnA)			ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0539	ug/L	108	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0524	ug/L	105	(70-130)	30	2.8
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00200	ug/L	100	(50-150)		
MS_202006020425	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00205	ug/L	103	(50-150)		

Total Organic Carbon by SM 5310C

Analytical Batch: 1253691

Analysis Date: 06/06/2020

LCS1	Total Organic Carbon		5	4.95	mg/L	99	(90-110)		
LCS2	Total Organic Carbon		5	5.00	mg/L	100	(90-110)	20	1.0
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.246	mg/L	123	(50-150)		
MS_202005300016	Total Organic Carbon	4.8	4	8.80	mg/L	93	(80-120)		
MSD_202005300016	Total Organic Carbon	4.8	4	8.83	mg/L	94	(80-120)	20	0.34

EPA Method 537.1 by EPA 537.1

Prep Batch: 1254164 Analytical Batch: 1254828

Analysis Date: 06/11/2020

DUP_202006090426	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0498	ug/L	106	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0503	ug/L	107	(70-130)	30	1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00219	ug/L	117	(50-150)		
MS2_202006090425	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0524	ug/L	111	(70-130)		
DUP_202006090426	13C2-PFDA (S)			97.5	%	98	(70-130)		
LCS3	13C2-PFDA (S)		100	95.3	%	95	(70-130)		
LCS4	13C2-PFDA (S)		100	97.1	%	97	(70-130)		
MBLK	13C2-PFDA (S)			95.7	%	96	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	101	%	101	(70-130)		
MS2_202006090425	13C2-PFDA (S)		100	96.9	%	97	(70-130)		
DUP_202006090426	13C2-PFHxA (S)			82.8	%	83	(70-130)		
LCS3	13C2-PFHxA (S)		100	99.5	%	99	(70-130)		
LCS4	13C2-PFHxA (S)		100	99.4	%	99	(70-130)		
MBLK	13C2-PFHxA (S)			98.5	%	98	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	97.8	%	98	(70-130)		
MS2_202006090425	13C2-PFHxA (S)		100	100	%	100	(70-130)		

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006090426	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			105	%	105	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS2_202006090425	13C2-PFOA- IS#1 (I)		100	102	%	103	(50-150)		
DUP_202006090426	13C3-HFPO-DA (S)			73.9	%	74	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	92.2	%	92	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	90.4	%	90	(70-130)		
MBLK	13C3-HFPO-DA (S)			89.4	%	89	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	85.3	%	85	(70-130)		
MS2_202006090425	13C3-HFPO-DA (S)		100	92.9	%	93	(70-130)		
DUP_202006090426	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.5	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS2_202006090425	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
DUP_202006090426	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0473	ug/L	98	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0482	ug/L	99	(70-130)	30	1.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00210	ug/L	111	(50-150)		
MS2_202006090425	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0494	ug/L	102	(70-130)		
DUP_202006090426	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0491	ug/L	105	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0485	ug/L	104	(70-130)	30	1.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00203	ug/L	109	(50-150)		
MS2_202006090425	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0497	ug/L	107	(70-130)		
DUP_202006090426	d3-NMeFOSAA (I)			113	%	113	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	105	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
MS2_202006090425	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
DUP_202006090426	d5-NEtFOSAA (S)			95.4	%	95	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	92.6	%	93	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	d5-NEtFOSAA (S)		100	95.5	%	95	(70-130)		
MBLK	d5-NEtFOSAA (S)			91.1	%	91	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	95.6	%	96	(70-130)		
MS2_202006090425	d5-NEtFOSAA (S)		100	91.0	%	91	(70-130)		
DUP_202006090426	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0465	ug/L	93	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0483	ug/L	97	(70-130)	30	3.8
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00193	ug/L	97	(50-150)		
MS2_202006090425	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0483	ug/L	97	(70-130)		
DUP_202006090426	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0486	ug/L	97	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0519	ug/L	104	(70-130)	30	6.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	107	(50-150)		
MS2_202006090425	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0490	ug/L	98	(70-130)		
DUP_202006090426	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0504	ug/L	101	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0514	ug/L	103	(70-130)	30	2.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	105	(50-150)		
MS2_202006090425	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0488	ug/L	98	(70-130)		
DUP_202006090426	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0476	ug/L	107	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0471	ug/L	106	(70-130)	30	1.1
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00200	ug/L	113	(50-150)		
MS2_202006090425	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0475	ug/L	107	(70-130)		
DUP_202006090426	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0509	ug/L	102	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0504	ug/L	101	(70-130)	30	0.99
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00225	ug/L	113	(50-150)		
MS2_202006090425	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0544	ug/L	109	(70-130)		
DUP_202006090426	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0506	ug/L	101	(70-130)	30	1.2
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00214	ug/L	107	(50-150)		
MS2_202006090425	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0507	ug/L	101	(70-130)		
DUP_202006090426	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0533	ug/L	107	(70-130)	30	2.7
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00246	ug/L	123	(50-150)		
MS2_202006090425	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0541	ug/L	108	(70-130)		
DUP_202006090426	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0494	ug/L	108	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0499	ug/L	110	(70-130)	30	0.81
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00203	ug/L	111	(50-150)		
MS2_202006090425	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0492	ug/L	108	(70-130)		
DUP_202006090426	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0514	ug/L	103	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0528	ug/L	106	(70-130)	30	2.7
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00227	ug/L	113	(50-150)		
MS2_202006090425	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0531	ug/L	106	(70-130)		
DUP_202006090426	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0512	ug/L	102	(70-130)	30	0.20
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00232	ug/L	116	(50-150)		
MS2_202006090425	Perfluorononanoic acid (PFNA)	ND	0.05	0.0517	ug/L	103	(70-130)		
DUP_202006090426	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0484	ug/L	105	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0491	ug/L	106	(70-130)	30	1.4
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00208	ug/L	112	(50-150)		
MS2_202006090425	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0482	ug/L	104	(70-130)		
DUP_202006090426	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0526	ug/L	105	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0533	ug/L	107	(70-130)	30	1.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00252	ug/L	126	(50-150)		
MS2_202006090425	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0530	ug/L	106	(70-130)		

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Report: 874079
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006090426	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0536	ug/L	107	(70-130)	30	2.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00262	ug/L	131	(50-150)		
MS2_202006090425	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0590	ug/L	118	(70-130)		
DUP_202006090426	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0487	ug/L	97	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0501	ug/L	100	(70-130)	30	2.8
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202006090425	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0510	ug/L	102	(70-130)		
DUP_202006090426	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0505	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0509	ug/L	102	(70-130)	30	0.79
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202006090425	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0510	ug/L	102	(70-130)		

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(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 06/12/2020

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 06/12/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 06/12/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 06/12/2020

Quant Report - Page 1 of 1

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Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 875389
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 875389
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:
 PO #: 5302

The following samples were received from you on **June 09, 2020 at 1448**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202006090542	GAC-1-20200609	06/09/2020 0952
	Static ID: 537.1	
	@537.1	
202006090558	GAC-2-20200609	06/09/2020 0955
	@537.1	
202006090559	GAC-3-20200609	06/09/2020 0958
	@537.1	
202006090560	GAC-4-20200609	06/09/2020 1001
	@537.1	
202006090561	IX-1-20200609	06/09/2020 1004
	@537.1	
202006090562	IX-2-20200609	06/09/2020 1007
	@537.1	
202006090563	IX-3-20200609	06/09/2020 1010
	@537.1	
202006090564	IX-4-20200609	06/09/2020 1013
	@537.1	
202006090565	LH-INF-20200609	06/09/2020 1016
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon
202006090566	LH-INF-DUP-20200609	06/09/2020 1017
	@537.1	
202006090567	GAC-5-20200609	06/09/2020 1132
	@537.1	
202006090568	GAC-6-20200609	06/09/2020 1135
	@537.1	
202006090569	GAC-7-20200609	06/09/2020 1138

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 875389
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:
PO #: 5302

The following samples were received from you on **June 09, 2020 at 1448**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202006090570	GAC-8-20200609	06/09/2020 1141
	@537.1	
202006090571	IX-5-20200609	06/09/2020 1144
	@537.1	
202006090572	IX-6-20200609	06/09/2020 1147
	@537.1	
202006090573	IX-7-20200609	06/09/2020 1150
	@537.1	
202006090574	IX-8-20200609	06/09/2020 1153
	@537.1	
202006090575	MB-INF-20200609	06/09/2020 1156
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon
202006090576	FB-20200609	06/09/2020 1200
	@537.1 FB	

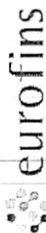
Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0

675389

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot																
PROJECT CONTACT: Miae Jeon		PROJECT NO.: 5302																
GLOBAL ID: (949) 679-1070		LAB CONTACT: Sophia Liang																
E-MAIL: mjeon@gsi-net.com		SAMPLER(S): (PRINT) RDT																
LABORATORY: Eurofins Eaton Analytical																		
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 72 HR																		
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdorres@gsi-net.com; Provide EDD of sample results																		
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION			TESTS									
		DATE	TIME			Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)						
	GAC-1 - 20200609	6-9	0952	Water	2													
	GAC-2 - 20200609		0955	Water	2													
	GAC-3 - 20200609		0958	Water	2													
	GAC-4 - 20200609		1001	Water	2													
	IX-1 - 20200609		1004	Water	2													
	IX-2 - 20200609		1007	Water	2													
	IX-3 - 20200609		1010	Water	2													
	IX-4 - 20200609		1013	Water	2													
	LH-INF - 20200609		1016	Water	5													
	LH-INF-DUP - 20200609		1017	Water	2													
	GAC-5 - 20200609		1132	Water	2													
	GAC-6 - 20200609		1135	Water	2													
	GAC-7 - 20200609		1138	Water	2													
	GAC-8 - 20200609		1141	Water	2													
Relinquished by: (Signature) <i>DL</i>		Received by: (Signature) <i>Quinn Brooks</i>		Date: <u>6-9-2020</u>		Time: <u>1417</u>												
Relinquished by: (Signature)		Received by: (Signature)		Date: <u>6.9.20</u>		Time: <u>1418</u>												
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:												

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) <i>RDT</i>																				
TEL: (949) 679-1070 LABORATORY: Eurofins Eaton Analytical		E-MAIL: mjeon@gsi-net.com		REQUESTED ANALYSES Please check box or fill in blank as needed.																				
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																								
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results																								
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)												
		DATE	TIME																					
	IX-5 -20200609	6-9	1144	Water	2		2	X																
	IX-6 -20200609	↓	1147	Water	2		2	X																
	IX-7 -20200609	↓	1150	Water	2		2	X																
	IX-8 -20200609	↓	1153	Water	2		2	X																
	MB-INF -20200609	↓	1156	Water	5		3	X			X	X												
	MB-INF-DUP			Water																				
	FB -20200609	6-9	1200	Water	1		1																	
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>						Date: <u>6-9-2020</u> Time: <u>1447</u>												
Relinquished by: (Signature)						Received by: (Signature) <i>[Signature]</i>						Date: <u>6-9-20</u> Time: <u>1448</u>												
Relinquished by: (Signature)						Received by: (Signature)						Date: Time:												



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 607324

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616A (Observation = 8.5 °C) (Corr. Factor = -0.2 °C) (Final = 8.3 °C)

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

- 4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)
- 5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____
- 6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

- 7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
 Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: Chris Booker SIGNATURE: Chris Booker PRINT NAME: _____ DATE: 6.9.20 TIME: 1448

COMPANY/TITLE: Eurofins Eaton Analytical

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 875389
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202006090565 <u>LH-INF-20200609</u>						
06/10/2020 16:47	Alkalinity in CaCO3 units		200		mg/L	2.0
06/09/2020 20:38	Chloride		110	250	mg/L	2.5
06/09/2020 20:38	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
06/09/2020 20:38	Nitrate as NO3 (calc)		12	45	mg/L	2.2
06/13/2020 01:51	Perfluorobutanesulfonic acid (PFBS)		0.0053		ug/L	0.0020
06/13/2020 01:51	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
06/13/2020 01:51	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
06/13/2020 01:51	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
06/13/2020 01:51	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
06/13/2020 01:51	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
06/09/2020 20:38	Sulfate		180	250	mg/L	2.5
06/09/2020 20:38	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
06/13/2020 00:03	Total Organic Carbon		0.64		mg/L	0.30
202006090566 <u>LH-INF-DUP-20200609</u>						
06/13/2020 02:01	Perfluorobutanesulfonic acid (PFBS)		0.0053		ug/L	0.0020
06/13/2020 02:01	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
06/13/2020 02:01	Perfluorohexanoic acid (PFHxA)		0.0025		ug/L	0.0020
06/13/2020 02:01	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
06/13/2020 02:01	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
06/13/2020 02:01	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
202006090575 <u>MB-INF-20200609</u>						
06/10/2020 16:40	Alkalinity in CaCO3 units		170		mg/L	2.0
06/09/2020 20:25	Chloride		52	250	mg/L	2.5
06/09/2020 20:25	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
06/09/2020 20:25	Nitrate as NO3 (calc)		10	45	mg/L	2.2
06/13/2020 03:37	Perfluorobutanesulfonic acid (PFBS)		0.0076		ug/L	0.0020
06/13/2020 03:37	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
06/13/2020 03:37	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
06/13/2020 03:37	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
06/13/2020 03:37	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
06/13/2020 03:37	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
06/13/2020 03:37	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
06/09/2020 20:25	Sulfate		78	250	mg/L	2.5
06/09/2020 20:25	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
06/13/2020 00:19	Total Organic Carbon		0.80		mg/L	0.30

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200609 (202006090542)					Sampled on 06/09/2020 0952				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	13C2-PFDA	98	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	13C2-PFHxA	97	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	82	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	116	%		1
06/11/20	06/13/20 00:54	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	100	%		1

GAC-2-20200609 (202006090558)					Sampled on 06/09/2020 0955				
EPA 537.1 - EPA Method 537.1									
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	13C2-PFDA	86	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	13C2-PFHxA	85	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	124	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	79	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	119	%		1
06/11/20	06/13/20 01:04	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-3-20200609 (202006090559)

Sampled on 06/09/2020 0958

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	13C2-PFDA	87	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	13C2-PFHxA	86	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	79	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	117	%		1
06/11/20	06/13/20 00:35	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	99	%		1

GAC-4-20200609 (202006090560)

Sampled on 06/09/2020 1001

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	13C2-PFDA	90	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	13C2-PFHxA	93	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	82	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	115	%		1
06/11/20	06/13/20 01:13	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	99	%		1

IX-1-20200609 (202006090561)

Sampled on 06/09/2020 1004

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	13C2-PFDA	90	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	13C2-PFHxA	89	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	84	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	117	%		1
06/11/20	06/13/20 00:16	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	101	%		1

IX-2-20200609 (202006090562)

Sampled on 06/09/2020 1007

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	13C2-PFDA	94	%		1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	13C2-PFHxA	92	%		1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	83	%		1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	117	%		1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 01:23	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	103	%		1
IX-3-20200609 (202006090563)						Sampled on 06/09/2020 1010			
EPA 537.1 - EPA Method 537.1									
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	13C2-PFDA	91	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	13C2-PFHxA	92	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	86	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	118	%		1
06/11/20	06/13/20 01:32	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	98	%		1

IX-4-20200609 (202006090564)

Sampled on 06/09/2020 1013

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	13C2-PFDA	100	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	13C2-PFHxA	92	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	85	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	114	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	120	%		1
06/11/20	06/13/20 01:42	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	99	%		1

LH-INF-20200609 (202006090565)

Sampled on 06/09/2020 1016

SM 5310C - Total Organic Carbon

06/13/20 00:03	1254850	(SM 5310C)	Total Organic Carbon	0.64	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

06/09/20 20:38	1254043	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
06/09/20 20:38	1254043	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
06/09/20 20:38	1254043	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
06/09/20 20:38	1254043	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

06/09/20 20:38	1254042	(EPA 300.0)	Chloride	110	mg/L	2.5	5
06/09/20 20:38	1254042	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0053	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	13C2-PFDA	90	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	13C2-PFHxA	82	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	134	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	76	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	124	%		1
06/11/20	06/13/20 01:51	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	97	%		1

SM 2320B - Alkalinity in CaCO3 units

06/10/20 16:47	1254250	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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LH-INF-DUP-20200609 (202006090566)

Sampled on 06/09/2020 1017

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0053	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0025	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	13C2-PFDA	92	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	13C2-PFHxA	76	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	138	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	73	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	123	%		1
06/11/20	06/13/20 02:01	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-5-20200609 (202006090567)

Sampled on 06/09/2020 1132

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	13C2-PFDA	84	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	13C2-PFHxA	85	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	130	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	82	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	119	%		1
06/11/20	06/13/20 02:20	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	99	%		1

GAC-6-20200609 (202006090568)

Sampled on 06/09/2020 1135

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	13C2-PFDA	92	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	13C2-PFHxA	91	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	79	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	118	%		1
06/11/20	06/13/20 02:30	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	100	%		1

GAC-7-20200609 (202006090569)

Sampled on 06/09/2020 1138

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	13C2-PFDA	87	%		1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	13C2-PFHxA	92	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	81	%		1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	114	%		1
06/11/20	06/13/20 02:39	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	105	%		1

GAC-8-20200609 (202006090570)

Sampled on 06/09/2020 1141

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	13C2-PFDA	93	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	13C2-PFHxA	95	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	84	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	119	%		1
06/11/20	06/13/20 02:49	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	99	%		1

IX-5-20200609 (202006090571)

Sampled on 06/09/2020 1144

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	11-chloro-eicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	13C2-PFDA	99	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	13C2-PFHxA	90	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	86	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	119	%		1
06/11/20	06/13/20 02:59	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	103	%		1

IX-6-20200609 (202006090572)

Sampled on 06/09/2020 1147

EPA 537.1 - EPA Method 537.1									
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	11-chloro-eicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	13C2-PFDA	99	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	13C2-PFHxA	94	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	88	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	116	%		1
06/11/20	06/13/20 03:08	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	108	%		1

IX-7-20200609 (202006090573)

Sampled on 06/09/2020 1150

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	13C2-PFDA	89	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	13C2-PFHxA	87	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	82	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	118	%		1
06/11/20	06/13/20 03:18	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	98	%		1

IX-8-20200609 (202006090574)

Sampled on 06/09/2020 1153

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	13C2-PFDA	94	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	13C2-PFHxA	89	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	87	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	117	%		1
06/11/20	06/13/20 03:27	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	102	%		1

MB-INF-20200609 (202006090575)

Sampled on 06/09/2020 1156

SM 5310C - Total Organic Carbon

06/13/20 00:19	1254850	(SM 5310C)	Total Organic Carbon	0.80	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

06/09/20 20:25	1254043	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
06/09/20 20:25	1254043	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
06/09/20 20:25	1254043	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
06/09/20 20:25	1254043	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

06/09/20 20:25	1254042	(EPA 300.0)	Chloride	52	mg/L	2.5	5
06/09/20 20:25	1254042	(EPA 300.0)	Sulfate	78	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0076	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1

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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	13C2-PFDA	95	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	13C2-PFHxA	81	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	13C2-PFOA- IS#1	134	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	13C3-HFPO-DA	75	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	13C4-PFOS- IS#2	114	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	d3-NMeFOSAA	127	%		1
06/11/20	06/13/20 03:37	1254539	1255097	(EPA 537.1)	d5-NEtFOSAA	95	%		1
SM 2320B - Alkalinity in CaCO3 units									
	06/10/20 16:40		1254250	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

FB-20200609 (202006090576)

Sampled on 06/09/2020 1200

EPA 537.1 - EPA Method 537.1

06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

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Report: 875389
Project: 0250000
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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/09/2020 1448

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	13C2-PFDA	101	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	13C2-PFHxA	96	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	13C3-HFPO-DA	92	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	d3-NMeFOSAA	100	%		1
06/18/20	06/19/20 17:27	1256161	1256803	(EPA 537.1)	d5-NEtFOSAA	102	%		1

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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1254042					Analysis Date: 06/09/2020				
LCS1	Chloride		25	25.7	mg/L	103	(90-110)		
LCS2	Chloride		25	25.8	mg/L	103	(90-110)	20	0.39
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.450	mg/L	90	(50-150)		
MS_202005260385	Chloride	42	26	70.5	mg/L	113	(80-120)		
MS_202006090451	Chloride	29	26	57.4	mg/L	115	(80-120)		
MSD_202005260385	Chloride	42	26	69.7	mg/L	110	(80-120)	20	1.1
MSD_202006090451	Chloride	29	26	57.6	mg/L	115	(80-120)	20	0.33
LCS1	Sulfate		50	51.0	mg/L	102	(90-110)		
LCS2	Sulfate		50	51.2	mg/L	102	(90-110)	20	0.39
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.953	mg/L	95	(50-150)		
MRL_W	Sulfate		0.25	0.238	mg/L	95	(50-150)		
MS_202005260385	Sulfate	150	50	ND	mg/L	109	(80-120)		
MS_202006090451	Sulfate	50	50	106	mg/L	112	(80-120)		
MSD_202005260385	Sulfate	150	50	ND	mg/L	105	(80-120)	20	0.78
MSD_202006090451	Sulfate	50	50	106	mg/L	112	(80-120)	20	0.23
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1254043					Analysis Date: 06/09/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.53	mg/L	101	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)	20	0.79
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0505	mg/L	101	(50-150)		
MS_202005260385	Nitrate as Nitrogen by IC	3.2	2.6	5.98	mg/L	110	(80-120)		
MS_202006090451	Nitrate as Nitrogen by IC	0.41	2.6	3.13	mg/L	109	(80-120)		
MSD_202005260385	Nitrate as Nitrogen by IC	3.2	2.6	5.91	mg/L	107	(80-120)	20	1.2
MSD_202006090451	Nitrate as Nitrogen by IC	0.41	2.6	3.14	mg/L	109	(80-120)	20	0.63
LCS1	Nitrite Nitrogen by IC		1	0.991	mg/L	99	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.997	mg/L	100	(90-110)	20	0.60
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0510	mg/L	102	(50-150)		
MS_202005260385	Nitrite Nitrogen by IC	ND	1	0.980	mg/L	98	(80-120)		
MS_202006090451	Nitrite Nitrogen by IC	ND	1	1.09	mg/L	104	(80-120)		
MSD_202005260385	Nitrite Nitrogen by IC	ND	1	0.965	mg/L	97	(80-120)	20	1.5

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202006090451	Nitrite Nitrogen by IC	ND	1	1.10	mg/L	104	(80-120)	20	0.53

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1254250

Analysis Date: 06/10/2020

LCS1	Alkalinity in CaCO3 units		100	101	mg/L	101	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	101	mg/L	101	(90-110)	20	0.0
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.98	mg/L	99	(50-150)		
MS_202006090619	Alkalinity in CaCO3 units	240	100	333	mg/L	92	(80-120)		
MSD_202006090619	Alkalinity in CaCO3 units	240	100	333	mg/L	92	(80-120)	20	0.096

Total Organic Carbon by SM 5310C

Analytical Batch: 1254850

Analysis Date: 06/12/2020

LCS1	Total Organic Carbon		5	4.96	mg/L	99	(90-110)		
LCS2	Total Organic Carbon		5	4.94	mg/L	99	(90-110)	20	0.40
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.241	mg/L	120	(50-150)		
MS_202006030249	Total Organic Carbon	5.2	4	9.18	mg/L	99	(80-120)		
MS2_202006030256	Total Organic Carbon	ND	2	2.01	mg/L	97	(80-120)		
MSD_202006030249	Total Organic Carbon	5.2	4	9.27	mg/L	102	(80-120)	20	1
MSD2_202006030256	Total Organic Carbon	ND	2	1.98	mg/L	95	(80-120)	20	1.5

EPA Method 537.1 by EPA 537.1

Prep Batch: 1254539 Analytical Batch: 1255097

Analysis Date: 06/13/2020

DUP_202006090559	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0446	ug/L	95	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0439	ug/L	93	(70-130)	30	2.5
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00156	ug/L	83	(50-150)		
MS1_202006090561	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0187	ug/L	79	(70-130)		
DUP_202006090559	13C2-PFDA (S)			87.9	%	88	(70-130)		
LCS3	13C2-PFDA (S)		100	91.0	%	91	(70-130)		
LCS4	13C2-PFDA (S)		100	97.7	%	98	(70-130)		
MBLK	13C2-PFDA (S)			97.2	%	97	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	95.7	%	96	(70-130)		
MS1_202006090561	13C2-PFDA (S)		100	98.5	%	98	(70-130)		
DUP_202006090559	13C2-PFHxA (S)			93.6	%	94	(70-130)		
LCS3	13C2-PFHxA (S)		100	98.0	%	98	(70-130)		
LCS4	13C2-PFHxA (S)		100	101	%	101	(70-130)		

Spike recovery is already corrected for native results.

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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFHxA (S)			93.5	%	93	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	97.8	%	98	(70-130)		
MS1_202006090561	13C2-PFHxA (S)		100	85.2	%	85	(70-130)		
DUP_202006090559	13C2-PFOA- IS#1 (I)			120	%	120	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MS1_202006090561	13C2-PFOA- IS#1 (I)		100	117	%	117	(50-150)		
DUP_202006090559	13C3-HFPO-DA (S)			87.6	%	88	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	92.9	%	93	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	88.8	%	89	(70-130)		
MBLK	13C3-HFPO-DA (S)			81.7	%	82	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	85.2	%	85	(70-130)		
MS1_202006090561	13C3-HFPO-DA (S)		100	82.7	%	83	(70-130)		
DUP_202006090559	13C4-PFOS- IS#2 (I)			105	%	105	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	96.9	%	97	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	94.8	%	95	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS1_202006090561	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
DUP_202006090559	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0460	ug/L	95	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0470	ug/L	97	(70-130)	30	2.4
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00190	ug/L	101	(50-150)		
MS1_202006090561	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0210	ug/L	89	(70-130)		
DUP_202006090559	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0433	ug/L	93	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0453	ug/L	97	(70-130)	30	5.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00178	ug/L	96	(50-150)		
MS1_202006090561	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0206	ug/L	89	(70-130)		
DUP_202006090559	d3-NMeFOSAA (I)			117	%	117	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MBLK	d3-NMeFOSAA (I)			116	%	116	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	112	%	112	(50-150)		

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Report: 875389
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202006090561	d3-NMeFOSAA (I)		100	119	%	119	(50-150)		
DUP_202006090559	d5-NEtFOSAA (S)			99.8	%	100	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	98.6	%	99	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	97.5	%	97	(70-130)		
MBLK	d5-NEtFOSAA (S)			100	%	101	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
MS1_202006090561	d5-NEtFOSAA (S)		100	86.7	%	87	(70-130)		
DUP_202006090559	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0420	ug/L	84	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0394	ug/L	79	(70-130)	30	6.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00149	ug/L	75	(50-150)		
MS1_202006090561	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0200	ug/L	80	(70-130)		
DUP_202006090559	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0519	ug/L	104	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0515	ug/L	103	(70-130)	30	0.97
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00213	ug/L	107	(50-150)		
MS1_202006090561	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0239	ug/L	96	(70-130)		
DUP_202006090559	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0498	ug/L	100	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0483	ug/L	97	(70-130)	30	3.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00203	ug/L	102	(50-150)		
MS1_202006090561	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0238	ug/L	95	(70-130)		
DUP_202006090559	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0435	ug/L	98	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0467	ug/L	105	(70-130)	30	6.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00177	ug/L	100	(50-150)		
MS1_202006090561	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0214	ug/L	96	(70-130)		
DUP_202006090559	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0462	ug/L	93	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0499	ug/L	100	(70-130)	30	8.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202006090561	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0253	ug/L	101	(70-130)		
DUP_202006090559	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		

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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0514	ug/L	103	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0532	ug/L	106	(70-130)	30	4.2
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00200	ug/L	100	(50-150)		
MS1_202006090561	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0218	ug/L	87	(70-130)		
DUP_202006090559	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0537	ug/L	107	(70-130)	30	5.2
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202006090561	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0246	ug/L	98	(70-130)		
DUP_202006090559	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0469	ug/L	103	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0482	ug/L	106	(70-130)	30	2.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00186	ug/L	102	(50-150)		
MS1_202006090561	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0230	ug/L	101	(70-130)		
DUP_202006090559	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0520	ug/L	104	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0544	ug/L	109	(70-130)	30	4.5
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00231	ug/L	116	(50-150)		
MS1_202006090561	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0225	ug/L	90	(70-130)		
DUP_202006090559	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0485	ug/L	97	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0492	ug/L	98	(70-130)	30	2.5
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202006090561	Perfluorononanoic acid (PFNA)	ND	0.025	0.0234	ug/L	93	(70-130)		
DUP_202006090559	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0456	ug/L	99	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0461	ug/L	100	(70-130)	30	0.22
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00190	ug/L	103	(50-150)		
MS1_202006090561	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0223	ug/L	96	(70-130)		
DUP_202006090559	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0513	ug/L	103	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0513	ug/L	103	(70-130)	30	0.59

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Report: 875389
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 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00226	ug/L	113	(50-150)		
MS1_202006090561	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0251	ug/L	100	(70-130)		
DUP_202006090559	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0504	ug/L	101	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0511	ug/L	102	(70-130)	30	2.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00196	ug/L	98	(50-150)		
MS1_202006090561	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0239	ug/L	96	(70-130)		
DUP_202006090559	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0472	ug/L	95	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0464	ug/L	93	(70-130)	30	1.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00188	ug/L	94	(50-150)		
MS1_202006090561	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0205	ug/L	82	(70-130)		
DUP_202006090559	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0485	ug/L	97	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0496	ug/L	99	(70-130)	30	3.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202006090561	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0232	ug/L	93	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1256161 Analytical Batch: 1256803

Analysis Date: 06/19/2020

DUP_202006170695	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0467	ug/L	99	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0451	ug/L	96	(70-130)	30	3.5
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00173	ug/L	92	(50-150)		
MS2_202006160507	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0448	ug/L	95	(70-130)		
DUP_202006170695	13C2-PFDA (S)			99.5	%	100	(70-130)		
LCS3	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS4	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	103	%	103	(70-130)		
MS2_202006160507	13C2-PFDA (S)		100	101	%	101	(70-130)		
DUP_202006170695	13C2-PFHxA (S)			98.2	%	98	(70-130)		
LCS3	13C2-PFHxA (S)		100	103	%	103	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFHxA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MS2_202006160507	13C2-PFHxA (S)		100	102	%	102	(70-130)		
DUP_202006170695	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			109	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MS2_202006160507	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
DUP_202006170695	13C3-HFPO-DA (S)			96.0	%	96	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	95.4	%	95	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	94.6	%	95	(70-130)		
MBLK	13C3-HFPO-DA (S)			92.7	%	93	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	98.4	%	98	(70-130)		
MS2_202006160507	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
DUP_202006170695	13C4-PFOS- IS#2 (I)			99.2	%	99	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	96.9	%	97	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	97.1	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.2	%	98	(50-150)		
MS2_202006160507	13C4-PFOS- IS#2 (I)		100	96.8	%	97	(50-150)		
DUP_202006170695	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0460	ug/L	95	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0454	ug/L	94	(70-130)	30	1.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00192	ug/L	102	(50-150)		
MS2_202006160507	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0449	ug/L	93	(70-130)		
DUP_202006170695	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0456	ug/L	98	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0449	ug/L	96	(70-130)	30	1.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00179	ug/L	97	(50-150)		
MS2_202006160507	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0447	ug/L	96	(70-130)		
DUP_202006170695	d3-NMeFOSAA (I)			97.5	%	97	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	98.5	%	99	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	94.6	%	95	(50-150)		
MBLK	d3-NMeFOSAA (I)			98.8	%	99	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	d3-NMeFOSAA (I)		100	95.9	%	96	(50-150)		
MS2_202006160507	d3-NMeFOSAA (I)		100	97.2	%	97	(50-150)		
DUP_202006170695	d5-NEtFOSAA (S)			99.2	%	99	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	97.6	%	98	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	98.0	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			99.7	%	100	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	102	%	103	(70-130)		
MS2_202006160507	d5-NEtFOSAA (S)		100	99.7	%	100	(70-130)		
DUP_202006170695	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0415	ug/L	83	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0422	ug/L	84	(70-130)	30	1.7
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00176	ug/L	88	(50-150)		
MS2_202006160507	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0447	ug/L	89	(70-130)		
DUP_202006170695	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0478	ug/L	96	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0478	ug/L	96	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00194	ug/L	97	(50-150)		
MS2_202006160507	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0458	ug/L	92	(70-130)		
DUP_202006170695	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0478	ug/L	96	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0479	ug/L	96	(70-130)	30	0.21
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00200	ug/L	100	(50-150)		
MS2_202006160507	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0468	ug/L	94	(70-130)		
DUP_202006170695	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0451	ug/L	102	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0448	ug/L	101	(70-130)	30	0.67
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00184	ug/L	104	(50-150)		
MS2_202006160507	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0426	ug/L	96	(70-130)		
DUP_202006170695	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0494	ug/L	99	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0494	ug/L	99	(70-130)	30	0.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00210	ug/L	105	(50-150)		
MS2_202006160507	Perfluorodecanoic acid (PFDA)		0.05	0.0496	ug/L	99	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006170695	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0489	ug/L	98	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0488	ug/L	98	(70-130)	30	0.21
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00194	ug/L	97	(50-150)		
MS2_202006160507	Perfluorododecanoic acid (PFDoA)		0.05	0.0484	ug/L	97	(70-130)		
DUP_202006170695	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0490	ug/L	98	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0502	ug/L	100	(70-130)	30	2.4
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00213	ug/L	106	(50-150)		
MS2_202006160507	Perfluoroheptanoic acid (PFHpA)		0.05	0.0482	ug/L	96	(70-130)		
DUP_202006170695	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0454	ug/L	100	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0446	ug/L	98	(70-130)	30	1.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00187	ug/L	102	(50-150)		
MS2_202006160507	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0436	ug/L	96	(70-130)		
DUP_202006170695	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0505	ug/L	101	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0494	ug/L	99	(70-130)	30	2.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00221	ug/L	110	(50-150)		
MS2_202006160507	Perfluorohexanoic acid (PFHxA)		0.05	0.0490	ug/L	98	(70-130)		
DUP_202006170695	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0498	ug/L	100	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0515	ug/L	103	(70-130)	30	3.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202006160507	Perfluorononanoic acid (PFNA)		0.05	0.0502	ug/L	100	(70-130)		
DUP_202006170695	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0464	ug/L	100	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0477	ug/L	103	(70-130)	30	2.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00195	ug/L	105	(50-150)		
MS2_202006160507	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0466	ug/L	97	(70-130)		
DUP_202006170695	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0489	ug/L	98	(70-130)		

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Report: 875389
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0502	ug/L	100	(70-130)	30	2.6
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00222	ug/L	111	(50-150)		
MS2_202006160507	Perfluorooctanoic acid (PFOA)	0.010	0.05	0.0487	ug/L	77	(70-130)		
DUP_202006170695	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0594	ug/L	119	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0566	ug/L	113	(70-130)	30	4.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00227	ug/L	114	(50-150)		
MS2_202006160507	Perfluorotetradecanoic acid (PFTA)		0.05	0.0576	ug/L	115	(70-130)		
DUP_202006170695	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0490	ug/L	98	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0486	ug/L	97	(70-130)	30	0.82
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00194	ug/L	97	(50-150)		
MS2_202006160507	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0486	ug/L	97	(70-130)		
DUP_202006170695	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0476	ug/L	95	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0476	ug/L	95	(70-130)	30	0.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00202	ug/L	101	(50-150)		
MS2_202006160507	Perfluoroundecanoic acid (PFUnA)		0.05	0.0461	ug/L	92	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Fecal Coliform Small, Fecal Coliform Large), MPN/100 mL (Fecal Coliform), Presence/Absence (P/A)* (Fecal Coliform)

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 06/22/2020

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 06/22/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 06/22/2020

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Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), and Presence/Absence (P/A)* (Total Coliform, E. Coli).

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 06/22/2020

Quant Report - Page 1 of 1

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Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 876642
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻ D		x	
Sulfite	SM 4500-SO ³ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 876642
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **June 16, 2020 at 1245**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202006160319	GAC-5-20200616 Static ID: 537.1 @537.1	06/16/2020 1102
202006160320	GAC-6-20200616 Static ID: 537.1 @537.1	06/16/2020 1105
202006160322	GAC-7-20200616 Static ID: 537.1 @537.1	06/16/2020 1108
202006160323	GAC-8-20200616 Static ID: 537.1 @537.1	06/16/2020 1111
202006160324	IX-5-20200616 Static ID: 537.1 @537.1	06/16/2020 1114
202006160325	IX-6-20200616 Static ID: 537.1 @537.1	06/16/2020 1117
202006160326	IX-7-20200616 Static ID: 537.1 @537.1	06/16/2020 1120
202006160327	IX-8-20200616 Static ID: 537.1 @537.1	06/16/2020 1123
202006160329	MB-INF-20200616 @537.1 Chloride	06/16/2020 1126
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
202006160330	FB-HOLD @537.1 FB	06/16/2020 1130

Test Description

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 876642
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

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The following samples were received from you on **June 16, 2020 at 1245**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1 -- EPA Method 537.1	
	@537.1 FB -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	

846642

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) <u>RDT</u>								
REQUESTED ANALYSES Please check box or fill in blank as needed.												
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.				PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME			Unpreserved	Preserved	Field Filtered				
	GAC-1			Water				X				
	GAC-2			Water				X				
	GAC-3			Water				X				
	GAC-4			Water				X				
	X-1			Water				X				
	X-2			Water				X				
	X-3			Water				X				
	X-4			Water				X				
	LH-INF			Water				X	X	X		
	LH-INF-DUP			Water								
	GAC-5-20200616	6-16	1102	Water	2			X				
	GAC-6-20200616	↓	1105	Water	2			X				
	GAC-7-20200616	↓	1108	Water	2			X				
	GAC-8-20200616	↓	1111	Water	2			X				
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature)		Date: <u>6-16-20</u>		Time: <u>1245</u>		
Relinquished by: (Signature)						Received by: (Signature)		Date: <u>6/16/20</u>		Time: <u>1245</u>		
Relinquished by: (Signature)						Received by: (Signature)		Date:		Time:		



FROM: GSI Environmental Inc.
19200 Von Karman Ave, Suite 800
Irvine, CA 92612
(949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miae Jeon
GLOBAL ID:

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang
SAMPLER(S) (PRINT)
RDT

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

LABORATORY: Eurofins Eaton Analytical

TURNAROUND TIME:
 SAME DAY 24 HR 48 HR
 72 HR 5 DAYS STANDARD

SPECIAL INSTRUCTIONS:
 Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com,
& rtorres@gsi-net.com;
 Provide EDD of sample results

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preserved		Field Filtered	REQUESTED ANALYSES							
		DATE	TIME			Unpreserved	Preserved		PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO ₃), Chloride (EPA 300.0)	Alkalinity (as CaCO ₃), (SM 2320B)	TOC (SM 5310C)	HOLD			
	IX-5-20200616	6-16	1114	Water	2		<u>2</u>		X							
	IX-6-20200616		1117	Water	2		<u>2</u>		X							
	IX-7-20200616		1120	Water	2		<u>2</u>		X							
	IX-8-20200616		1123	Water	2		<u>2</u>		X							
	MB-INF-20200616		1126	Water	5		<u>23</u>		X	X	X	X				
	MB-INF-DUP			Water					X							
	FB	6-16	1130	Water					X							

Relinquished by: (Signature) Robert Lewis Received by: (Signature) [Signature] Date: 6-16-20 Time: 1245

Relinquished by: (Signature) Received by: (Signature) Date: 6/16/20 Time: 1245

Relinquished by: (Signature) Received by: (Signature) Date: _____ Time: _____



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: Shelton

SAMPLE TEMP RECEIVED:

Note: if samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 60A (Observation = 6.1 °C) (Corr. Factor = 2.2 °C) (Final = 5.9 °C)

TYPE OF ICE: Real Synthetic No Ice Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

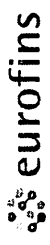
7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: <u>[Signature]</u>	PRINT NAME: <u>YN</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>6/16/20</u>	TIME: <u>12:45</u>
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Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 5/27/2020 6:05:20PM

Note: Sampler Please return this paper with your samples

Kit #: 264842

Client ID: WRD

Project Code: 0250000 Bottle Orders
Group Name: WRD Pilot(Set#2)
PO#/JOB#:

Description: WRD Pilot Set #2
Shipping Method: Pickup by client

Created By: Anisha Zachariah - [ZR4B]
Deliver By: 06/08/2020
STG: Bottle Orders
Ice Type: G

Ship Sample Kits to
GSI Environmental Inc.
Attn: Robert Torres
Phone: 951-616-8406

Send Report to
Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712
Attn: Joseph Liles
Phone: 562-275-4226

Billing Address
Water Replenishment District
Attn: Eurofins Calscience
Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712
Attn: Brian Partington
Phone: 562-275-4249
Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
4	Total Organic Carbon	4	UN1830
4	@ANIONS48, Chloride, Sulfate	4	
4	Alkalinity in CaCO3 units	4	
40	@537.1	80	
2	@537.1 TB	2	
2	@537.1 FB	2	
Sum Tests: 56		Sum Bottles: 96	

Sum Bottles: 96

Comments

SHIPPING:
 - CLIENT PIU TUESDAY, JUNE 9TH MORNING
 - PACKAGE IN 4 COOLERS

GSI SAMPLER:
 - PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES.
 - NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP.

ASM:
 •Please also send invoices to Miae Jeon (mjeon@gsi-net.com)
 •Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pgalvin@gsi-net.com, and rdtorres@gsi-net.com.

Code Status Date Shipped Via Tracking # # of Coolers Prepared By

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 876642
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/16/2020 1245

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202006160326	<u>IX-7-20200616</u>				
06/18/2020 21:02	Perfluorohexanoic acid (PFHxA)		0.0022		ug/L	0.0020
	202006160329	<u>MB-INF-20200616</u>				
06/17/2020 19:07	Alkalinity in CaCO3 units		170		mg/L	2.0
06/16/2020 15:35	Chloride		52	250	mg/L	2.5
06/16/2020 15:35	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
06/16/2020 15:35	Nitrate as NO3 (calc)		11	45	mg/L	2.2
06/18/2020 21:22	Perfluorobutanesulfonic acid (PFBS)		0.0088		ug/L	0.0020
06/18/2020 21:22	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
06/18/2020 21:22	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
06/18/2020 21:22	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
06/18/2020 21:22	Perfluorononanoic acid (PFNA)		0.0033		ug/L	0.0020
06/18/2020 21:22	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
06/18/2020 21:22	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
06/16/2020 15:35	Sulfate		78	250	mg/L	2.5
06/16/2020 15:35	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
06/18/2020 01:21	Total Organic Carbon		0.82		mg/L	0.30

Tel: (626) 386-1100
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Report: 876642
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 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/16/2020 1245

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-5-20200616 (202006160319)					Sampled on 06/16/2020 1102				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	13C2-PFDA	104	%		1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	13C2-PFHxA	106	%		1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	13C3-HFPO-DA	98	%		1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	d3-NMeFOSAA	109	%		1
06/17/20	06/18/20 20:05	1255880	1256421	(EPA 537.1)	d5-NEtFOSAA	101	%		1

GAC-6-20200616 (202006160320)					Sampled on 06/16/2020 1105				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 876642
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/16/2020 1245

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	13C2-PFDA	104	%		1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	13C2-PFHxA	105	%		1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	13C3-HFPO-DA	98	%		1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	d3-NMeFOSAA	107	%		1
06/17/20	06/18/20 20:15	1255880	1256421	(EPA 537.1)	d5-NEtFOSAA	103	%		1

GAC-7-20200616 (202006160322)

Sampled on 06/16/2020 1108

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 876642
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/16/2020 1245

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	13C2-PFDA	101	%		1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	13C2-PFHxA	107	%		1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	13C3-HFPO-DA	99	%		1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	d3-NMeFOSAA	105	%		1
06/17/20	06/18/20 20:24	1255880	1256421	(EPA 537.1)	d5-NEtFOSAA	103	%		1

GAC-8-20200616 (202006160323)

Sampled on 06/16/2020 1111

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 876642
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/16/2020 1245

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	13C2-PFDA	96	%		1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	13C2-PFHxA	104	%		1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	13C3-HFPO-DA	97	%		1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	d3-NMeFOSAA	105	%		1
06/17/20	06/18/20 20:34	1255880	1256421	(EPA 537.1)	d5-NEtFOSAA	101	%		1

IX-5-20200616 (202006160324)

Static ID: 537.1

Sampled on 06/16/2020 1114

EPA 537.1 - EPA Method 537.1

06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 876642
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/16/2020 1245

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	13C2-PFDA	99	%		1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	13C2-PFHxA	102	%		1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	13C3-HFPO-DA	97	%		1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	d3-NMeFOSAA	110	%		1
06/17/20	06/18/20 20:43	1255880	1256421	(EPA 537.1)	d5-NEtFOSAA	97	%		1

IX-6-20200616 (202006160325)

Sampled on 06/16/2020 1117

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	13C2-PFDA	98	%		1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	13C2-PFHxA	105	%		1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	13C3-HFPO-DA	98	%		1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	d3-NMeFOSAA	110	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 876642
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/16/2020 1245

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/17/20	06/18/20 20:53	1255880	1256421	(EPA 537.1)	d5-NEtFOSAA	100	%		1
IX-7-20200616 (202006160326)						Sampled on 06/16/2020 1120			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	13C2-PFDA	99	%		1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	13C2-PFHxA	101	%		1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	13C3-HFPO-DA	95	%		1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	d3-NMeFOSAA	109	%		1
06/17/20	06/18/20 21:02	1255880	1256421	(EPA 537.1)	d5-NEtFOSAA	98	%		1

IX-8-20200616 (202006160327)						Sampled on 06/16/2020 1123			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 876642
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/16/2020 1245

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	13C2-PFDA	104	%		1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	13C2-PFHxA	107	%		1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	13C3-HFPO-DA	100	%		1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	d3-NMeFOSAA	108	%		1
06/17/20	06/18/20 21:12	1255880	1256421	(EPA 537.1)	d5-NEtFOSAA	102	%		1

MB-INF-20200616 (202006160329)

Sampled on 06/16/2020 1126

SM 5310C - Total Organic Carbon

06/18/20 01:21	1256135	(SM 5310C)	Total Organic Carbon	0.82	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

06/16/20 15:35	1255656	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
06/16/20 15:35	1255656	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
06/16/20 15:35	1255656	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
06/16/20 15:35	1255656	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

06/16/20 15:35	1255657	(EPA 300.0)	Chloride	52	mg/L	2.5	5
06/16/20 15:35	1255657	(EPA 300.0)	Sulfate	78	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

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Report: 876642
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/16/2020 1245

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0088	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0033	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	13C2-PFDA	100	%		1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	13C2-PFHxA	100	%		1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	13C3-HFPO-DA	92	%		1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	d3-NMeFOSAA	117	%		1
06/17/20	06/18/20 21:22	1255880	1256421	(EPA 537.1)	d5-NEtFOSAA	92	%		1

SM 2320B - Alkalinity in CaCO3 units

06/17/20 19:07	1255823	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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FB-HOLD (202006160330)

Sampled on 06/16/2020 1130

EPA 537.1 - EPA Method 537.1

06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Report: 876642
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/16/2020 1245

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	13C2-PFDA	97	%		1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	13C2-PFHxA	100	%		1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	13C3-HFPO-DA	94	%		1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	d3-NMeFOSAA	112	%		1
06/24/20	06/25/20 20:04	1257312	1257996	(EPA 537.1)	d5-NEtFOSAA	92	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 876642
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1255656

202006160329 MB-INF-20200616

Analysis Date: 06/16/2020

Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1255657

202006160329 MB-INF-20200616

Analysis Date: 06/16/2020

Analyzed by: HL7J

Alkalinity in CaCO3 units

Analytical Batch: 1255823

202006160329 MB-INF-20200616

Analysis Date: 06/17/2020

Analyzed by: ZB2Z

Total Organic Carbon

Analytical Batch: 1256135

202006160329 MB-INF-20200616

Analysis Date: 06/18/2020

Analyzed by: ZS6I

EPA Method 537.1

Prep Batch: 1255880 Analytical Batch: 1256421

202006160319 GAC-5-20200616
202006160320 GAC-6-20200616
202006160322 GAC-7-20200616
202006160323 GAC-8-20200616
202006160324 IX-5-20200616
202006160325 IX-6-20200616
202006160326 IX-7-20200616
202006160327 IX-8-20200616
202006160329 MB-INF-20200616

Analysis Date: 06/18/2020

Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM

EPA Method 537.1

Prep Batch: 1257312 Analytical Batch: 1257996

202006160330 FB-HOLD

Analysis Date: 06/25/2020

Analyzed by: KAM

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Report: 876642
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1255656					Analysis Date: 06/16/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.52	mg/L	101	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.52	mg/L	101	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0484	mg/L	97	(50-150)		
MS_202006160046	Nitrate as Nitrogen by IC	2.5	2.6	5.26	mg/L	109	(80-120)		
MS_202006160329	Nitrate as Nitrogen by IC	2.4	6.5	9.08	mg/L	107	(80-120)		
MSD_202006160046	Nitrate as Nitrogen by IC	2.5	2.6	5.28	mg/L	110	(80-120)	20	0.30
MSD_202006160329	Nitrate as Nitrogen by IC	2.4	6.5	9.08	mg/L	107	(80-120)	20	0.062
LCS1	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0518	mg/L	104	(50-150)		
MS_202006160329	Nitrite Nitrogen by IC	ND	2.5	2.61	mg/L	104	(80-120)		
MS_202006160046	Nitrite Nitrogen by IC	ND	1	0.932	mg/L	93	(80-120)		
MSD_202006160329	Nitrite Nitrogen by IC	ND	2.5	2.60	mg/L	104	(80-120)	20	0.23
MSD_202006160046	Nitrite Nitrogen by IC	ND	1	0.935	mg/L	94	(80-120)	20	0.35
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1255657					Analysis Date: 06/16/2020				
LCS1	Chloride		25	26.2	mg/L	105	(90-110)		
LCS2	Chloride		25	26.2	mg/L	105	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.444	mg/L	89	(50-150)		
MS_202006160329	Chloride	52	65	124	mg/L	115	(80-120)		
MSD_202006160329	Chloride	52	65	124	mg/L	115	(80-120)	20	0.093
LCS1	Sulfate		50	51.4	mg/L	103	(90-110)		
LCS2	Sulfate		50	51.3	mg/L	103	(90-110)	20	0.20
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.971	mg/L	97	(50-150)		
MRLW	Sulfate		0.25	0.231	mg/L	92	(50-150)		
MS_202006160329	Sulfate	78	125	216	mg/L	110	(80-120)		
MSD_202006160329	Sulfate	78	125	216	mg/L	110	(80-120)	20	0.13
Alkalinity in CaCO3 units by SM 2320B									
Analytical Batch: 1255823					Analysis Date: 06/17/2020				
LCS1	Alkalinity in CaCO3 units		100	99.9	mg/L	100	(90-110)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Alkalinity in CaCO3 units		100	99.3	mg/L	99	(90-110)	20	0.60
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.92	mg/L	96	(50-150)		
MS_202006160107	Alkalinity in CaCO3 units	150	100	256	mg/L	101	(80-120)		
MS_202006160409	Alkalinity in CaCO3 units	200	100	258	mg/L	<u>55</u>	(80-120)		
MSD_202006160107	Alkalinity in CaCO3 units	150	100	256	mg/L	101	(80-120)	20	0.059
MSD_202006160409	Alkalinity in CaCO3 units	200	100	262	mg/L	<u>59</u>	(80-120)	20	1.4

Total Organic Carbon by SM 5310C

Analytical Batch: 1256135

Analysis Date: 06/17/2020

LCS1	Total Organic Carbon		5	5.34	mg/L	107	(90-110)		
LCS2	Total Organic Carbon		5	5.33	mg/L	107	(90-110)	20	0.38
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.248	mg/L	124	(50-150)		
MS_202006160089	Total Organic Carbon	2.6	4	6.94	mg/L	109	(80-120)		
MS2_202006160101	Total Organic Carbon	2.6	2	4.76	mg/L	109	(80-120)		
MSD_202006160089	Total Organic Carbon	2.6	4	6.92	mg/L	108	(80-120)	20	0.29
MSD2_202006160101	Total Organic Carbon	2.6	2	4.78	mg/L	110	(80-120)	20	0.31

EPA Method 537.1 by EPA 537.1

Prep Batch: 1255880 Analytical Batch: 1256421

Analysis Date: 06/18/2020

DUP_202006160312	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0252	ug/L	107	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0249	ug/L	106	(70-130)	30	1.6
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00196	ug/L	104	(50-150)		
MS1_202006160311	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0252	ug/L	107	(70-130)		
DUP_202006160312	13C2-PFDA (S)			101	%	101	(70-130)		
LCS1	13C2-PFDA (S)		100	103	%	103	(70-130)		
LCS2	13C2-PFDA (S)		100	100	%	100	(70-130)		
MBLK	13C2-PFDA (S)			105	%	105	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	100	%	100	(70-130)		
MS1_202006160311	13C2-PFDA (S)		100	101	%	101	(70-130)		
DUP_202006160312	13C2-PFHxA (S)			104	%	105	(70-130)		
LCS1	13C2-PFHxA (S)		100	103	%	103	(70-130)		
LCS2	13C2-PFHxA (S)		100	103	%	103	(70-130)		
MBLK	13C2-PFHxA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MS1_202006160311	13C2-PFHxA (S)		100	106	%	106	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006160312	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MS1_202006160311	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202006160312	13C3-HFPO-DA (S)			100	%	101	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	99.3	%	99	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	99.4	%	99	(70-130)		
MBLK	13C3-HFPO-DA (S)			102	%	102	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	98.5	%	99	(70-130)		
MS1_202006160311	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
DUP_202006160312	13C4-PFOS- IS#2 (I)			100	%	100	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	97.8	%	98	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	99.8	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.0	%	97	(50-150)		
MS1_202006160311	13C4-PFOS- IS#2 (I)		100	99.6	%	100	(50-150)		
DUP_202006160312	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0250	ug/L	106	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0248	ug/L	105	(70-130)	30	0.80
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00195	ug/L	103	(50-150)		
MS1_202006160311	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0252	ug/L	106	(70-130)		
DUP_202006160312	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0245	ug/L	105	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0238	ug/L	102	(70-130)	30	2.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00191	ug/L	103	(50-150)		
MS1_202006160311	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0242	ug/L	104	(70-130)		
DUP_202006160312	d3-NMeFOSAA (I)			103	%	103	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MS1_202006160311	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
DUP_202006160312	d5-NEtFOSAA (S)			98.8	%	99	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	92.1	%	92	(70-130)		

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 876642
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	d5-NEtFOSAA (S)		100	94.3	%	94	(70-130)		
MBLK	d5-NEtFOSAA (S)			101	%	101	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	97.0	%	97	(70-130)		
MS1_202006160311	d5-NEtFOSAA (S)		100	98.4	%	98	(70-130)		
DUP_202006160312	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0249	ug/L	100	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0242	ug/L	97	(70-130)	30	2.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00192	ug/L	96	(50-150)		
MS1_202006160311	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0254	ug/L	102	(70-130)		
DUP_202006160312	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0243	ug/L	97	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0239	ug/L	96	(70-130)	30	1.7
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00189	ug/L	94	(50-150)		
MS1_202006160311	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0246	ug/L	99	(70-130)		
DUP_202006160312	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0239	ug/L	96	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0237	ug/L	95	(70-130)	30	0.84
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00195	ug/L	98	(50-150)		
MS1_202006160311	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0241	ug/L	97	(70-130)		
DUP_202006160312	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0231	ug/L	104	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0232	ug/L	105	(70-130)	30	0.86
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00184	ug/L	104	(50-150)		
MS1_202006160311	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0229	ug/L	104	(70-130)		
DUP_202006160312	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0250	ug/L	100	(70-130)	30	0.80
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202006160311	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0262	ug/L	105	(70-130)		
DUP_202006160312	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0245	ug/L	98	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0247	ug/L	99	(70-130)	30	0.81
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00194	ug/L	97	(50-150)		
MS1_202006160311	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0255	ug/L	102	(70-130)		
DUP_202006160312	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0274	ug/L	110	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0271	ug/L	108	(70-130)	30	1.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00213	ug/L	107	(50-150)		
MS1_202006160311	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0279	ug/L	112	(70-130)		
DUP_202006160312	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0249	ug/L	109	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0243	ug/L	107	(70-130)	30	2.4
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS1_202006160311	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0242	ug/L	106	(70-130)		
DUP_202006160312	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0264	ug/L	106	(70-130)	30	2.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00220	ug/L	110	(50-150)		
MS1_202006160311	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0267	ug/L	105	(70-130)		
DUP_202006160312	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0267	ug/L	107	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0260	ug/L	104	(70-130)	30	2.7
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00208	ug/L	104	(50-150)		
MS1_202006160311	Perfluorononanoic acid (PFNA)	ND	0.025	0.0273	ug/L	109	(70-130)		
DUP_202006160312	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0243	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0239	ug/L	103	(70-130)	30	1.7
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00206	ug/L	111	(50-150)		
MS1_202006160311	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0238	ug/L	103	(70-130)		
DUP_202006160312	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0263	ug/L	105	(70-130)	30	2.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00220	ug/L	110	(50-150)		
MS1_202006160311	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0268	ug/L	107	(70-130)		

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Report: 876642
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006160312	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0260	ug/L	104	(70-130)	30	4.5
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00227	ug/L	113	(50-150)		
MS1_202006160311	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0276	ug/L	110	(70-130)		
DUP_202006160312	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0246	ug/L	98	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0245	ug/L	98	(70-130)	30	0.41
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00196	ug/L	98	(50-150)		
MS1_202006160311	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0256	ug/L	102	(70-130)		
DUP_202006160312	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0244	ug/L	98	(70-130)	30	0.82
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00197	ug/L	99	(50-150)		
MS1_202006160311	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0247	ug/L	99	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1257312 Analytical Batch: 1257996

Analysis Date: 06/25/2020

DUP_202006220621	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0493	ug/L	105	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0479	ug/L	102	(70-130)	30	2.9
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00188	ug/L	100	(50-150)		
MS_202006220620	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00190	ug/L	101	(50-150)		
DUP_202006220621	13C2-PFDA (S)			96.4	%	96	(70-130)		
LCS3	13C2-PFDA (S)		100	94.8	%	95	(70-130)		
LCS4	13C2-PFDA (S)		100	93.8	%	94	(70-130)		
MBLK	13C2-PFDA (S)			94.4	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	95.2	%	95	(70-130)		
MS_202006220620	13C2-PFDA (S)		100	91.1	%	91	(70-130)		
DUP_202006220621	13C2-PFHxA (S)			97.7	%	98	(70-130)		
LCS3	13C2-PFHxA (S)		100	99.3	%	99	(70-130)		
LCS4	13C2-PFHxA (S)		100	100	%	100	(70-130)		
MBLK	13C2-PFHxA (S)			95.4	%	95	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	99.6	%	100	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202006220620	13C2-PFHxA (S)		100	95.2	%	95	(70-130)		
DUP_202006220621	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MS_202006220620	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
DUP_202006220621	13C3-HFPO-DA (S)			95.7	%	96	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	91.7	%	92	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	92.1	%	92	(70-130)		
MBLK	13C3-HFPO-DA (S)			88.8	%	89	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.1	%	94	(70-130)		
MS_202006220620	13C3-HFPO-DA (S)		100	90.8	%	91	(70-130)		
DUP_202006220621	13C4-PFOS- IS#2 (I)			99.3	%	99	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	105	(50-150)		
MS_202006220620	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202006220621	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0496	ug/L	102	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0478	ug/L	99	(70-130)	30	3.7
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00222	ug/L	118	(50-150)		
MS_202006220620	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00199	ug/L	105	(50-150)		
DUP_202006220621	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0476	ug/L	102	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0472	ug/L	101	(70-130)	30	0.84
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00185	ug/L	99	(50-150)		
MS_202006220620	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00184	ug/L	99	(50-150)		
DUP_202006220621	d3-NMeFOSAA (I)			110	%	110	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MBLK	d3-NMeFOSAA (I)			111	%	111	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	108	%	109	(50-150)		
MS_202006220620	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
DUP_202006220621	d5-NEtFOSAA (S)			90.7	%	91	(70-130)		

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Report: 876642
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	d5-NEtFOSAA (S)		100	88.8	%	89	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	88.4	%	88	(70-130)		
MBLK	d5-NEtFOSAA (S)			89.6	%	90	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	90.4	%	90	(70-130)		
MS_202006220620	d5-NEtFOSAA (S)		100	89.5	%	90	(70-130)		
DUP_202006220621	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0480	ug/L	96	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0487	ug/L	97	(70-130)	30	1.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00202	ug/L	101	(50-150)		
MS_202006220620	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00205	ug/L	103	(50-150)		
DUP_202006220621	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0483	ug/L	97	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0480	ug/L	96	(70-130)	30	0.62
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00192	ug/L	96	(50-150)		
MS_202006220620	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00211	ug/L	105	(50-150)		
DUP_202006220621	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0476	ug/L	95	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0478	ug/L	96	(70-130)	30	0.42
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00192	ug/L	96	(50-150)		
MS_202006220620	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00202	ug/L	101	(50-150)		
DUP_202006220621	Perfluorobutanesulfonic acid (PFBS)	0.023		0.0236	ug/L		(0-30)	30	2.4
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0475	ug/L	107	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0475	ug/L	107	(70-130)	30	0.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00190	ug/L	107	(50-150)		
MS_202006220620	Perfluorobutanesulfonic acid (PFBS)	0.0060	0.0018	0.00774	ug/L	100	(50-150)		
DUP_202006220621	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0505	ug/L	101	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0481	ug/L	96	(70-130)	30	4.9
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00215	ug/L	107	(50-150)		
MS_202006220620	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00270	ug/L	100	(50-150)		
DUP_202006220621	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0512	ug/L	102	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0491	ug/L	98	(70-130)	30	4.2

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Report: 876642
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202006220620	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202006220621	Perfluoroheptanoic acid (PFHpA)	0.048		0.0492	ug/L		(0-30)	30	2.4
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0539	ug/L	108	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0538	ug/L	108	(70-130)	30	0.19
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00231	ug/L	116	(50-150)		
MS_202006220620	Perfluoroheptanoic acid (PFHpA)	0.014	0.002	0.0161	ug/L	94	(50-150)		
DUP_202006220621	Perfluorohexanesulfonic acid (PFHxS)	0.19		0.201	ug/L		(0-30)	30	5.4
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0497	ug/L	109	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0494	ug/L	108	(70-130)	30	0.61
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS_202006220620	Perfluorohexanesulfonic acid (PFHxS)	0.046	0.0018	0.0476	ug/L	60	(50-150)		
DUP_202006220621	Perfluorohexanoic acid (PFHxA)	0.14		0.140	ug/L		(0-30)	30	2.8
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0510	ug/L	102	(70-130)	30	2.7
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202006220620	Perfluorohexanoic acid (PFHxA)	0.029	0.002	0.0308	ug/L	102	(50-150)		
DUP_202006220621	Perfluorononanoic acid (PFNA)	0.0029		0.00297	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0517	ug/L	103	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0522	ug/L	104	(70-130)	30	0.96
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202006220620	Perfluorononanoic acid (PFNA)	ND	0.002	0.00342	ug/L	97	(50-150)		
DUP_202006220621	Perfluorooctanesulfonic acid (PFOS)	0.20		0.211	ug/L		(0-30)	30	3.2
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0484	ug/L	105	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0486	ug/L	105	(70-130)	30	0.41
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00194	ug/L	105	(50-150)		
MS_202006220620	Perfluorooctanesulfonic acid (PFOS)	0.12	0.019	0.114	ug/L	-208	(50-150)		
DUP_202006220621	Perfluorooctanoic acid (PFOA)	0.051		0.0508	ug/L		(0-30)	30	0.047
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0520	ug/L	104	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0521	ug/L	104	(70-130)	30	0.19
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00224	ug/L	112	(50-150)		

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202006220620	Perfluorooctanoic acid (PFOA)	0.011	0.002	0.0137	ug/L	112	(50-150)		
DUP_202006220621	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0539	ug/L	108	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0528	ug/L	106	(70-130)	30	2.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00242	ug/L	121	(50-150)		
MS_202006220620	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00236	ug/L	109	(50-150)		
DUP_202006220621	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0485	ug/L	97	(70-130)	30	5.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	101	(50-150)		
MS_202006220620	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00206	ug/L	103	(50-150)		
DUP_202006220621	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0506	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0489	ug/L	98	(70-130)	30	3.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00206	ug/L	103	(50-150)		
MS_202006220620	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00210	ug/L	100	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 06/26/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 06/26/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot	E. Coli	Tot	E. Coli	Tot	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 06/26/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 06/26/2020

Quant Report - Page 1 of 1

Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 877883
Project: 0250000
Group: WRD Pilot [Set #1]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 877883
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **June 23, 2020 at 1440**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202006230605</u>	GAC-5-20200623	06/23/2020 1105
	@537.1	
<u>202006230606</u>	GAC-6-20200623	06/23/2020 1108
	@537.1	
<u>202006230607</u>	GAC-7-20200623	06/23/2020 1111
	@537.1	
<u>202006230608</u>	GAC-8-20200623	06/23/2020 1114
	@537.1	
<u>202006230609</u>	IX-5-20200623	06/23/2020 1117
	@537.1	
<u>202006230610</u>	IX-6-20200623	06/23/2020 1120
	@537.1	
<u>202006230611</u>	IX-7-20200623	06/23/2020 1123
	@537.1	
<u>202006230612</u>	IX-8-20200623	06/23/2020 1126
	@537.1	
<u>202006230613</u>	MB-INF-20200623	06/23/2020 1129
	@ICP	Total Hardness as CaCO3 by ICP
	Uranium by ICPMS as pCi/L	@537.1
	@VOASDWA	Alkalinity in CaCO3 units
	Calcium Total ICAP	Chloride
	Iron Total ICAP	Magnesium Total ICAP
	Nitrite as NO2 (calc)	Oil and Grease by 1664(subbed)
	Potassium Total ICAP	Sodium Total ICAP
	Total Dissolved Solid (TDS)	Total Organic Carbon
	@ICPMS	@ANIONS48
		Arsenic Total ICAP/MS
		Hexavalent chromium(Dissolved)
		Manganese Total ICAP/MS
		Perchlorate
		Sulfate
		Total Suspended Solids (TSS)

Test Description

@ICP -- ICP Metals

@ICPMS -- ICPMS Metals

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 877883
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **June 23, 2020 at 1440**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1 -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	
	@VOASDWA -- Volatile Organics by GCMS	

87883

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302	
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		LAB CONTACT: Sophia Liang	
LABORATORY: Eurofins Eaton Analytical		PROJECT CONTACT: Miae Jeon		SAMPLER(S): (PRINT) RDT180	
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		GLOBAL ID:		Please check box or fill in blank as needed.	
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtres@gsi-net.com; Provide EDD of sample results		NO. OF CONT.		Oil & Grease (EPA 1664)	
LAB USE ONLY		MATRIX		TSS (SM 2540D)	
SAMPLE ID		DATE		TDS (E160.1/SM 2540C)	
SAMPLING TIME		TIME		TOC (SM 5310C)	
DATE		NO. OF CONT.		VOCs (EPA 524.2)	
GAG-1		Water		Total Hardness as CaCO3 (SM 2340B)	
GAG-2		Water		Fe, Na, K, Ca, Mg (EPA 200.7)	
GAG-3		Water		Hexavalent Chromium (EPA 218.6)	
GAG-4		Water		Perchlorate (EPA 314.0)	
IX-1		Water		Manganese (EPA 200.8)	
IX-2		Water		Uranium, Arsenic, (SM 2320B)	
IX-3		Water		Alkalinity (as CaCO3), (SM 2320B)	
IX-4		Water		Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	
LH-INF		Water		PFAS - full list (EPA 537.1)	
LH-INF-DUP		Water		Field Filtered	
GAC-5 - 20200623		6-23		Preserved	
GAC-6 - 20200623		1105		Unpreserved	
GAC-7 - 20200623		1108		Received by: (Signature) <i>[Signature]</i>	
GAC-8 - 20200623		1111		Date: 6-23-20	
GAC-8 - 20200623		1114		Time: 1440	
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 6-23-20	
Relinquished by: (Signature)		Received by: (Signature)		Time: 1440	
Relinquished by: (Signature)		Received by: (Signature)		Date: 6-23-20	
Relinquished by: (Signature)		Received by: (Signature)		Time: 1440	

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot	
E-MAIL: mjeon@gsi-net.com		PROJECT CONTACT: Miae Jeon	
LABORATORY: Eurofins Eaton Analytical		LAB CONTACT: Sophia Liang	
SAMPLER(S): (PRINT) <u>RDT/BC</u>		PROJECT NO.: 5302	

TURNAROUND TIME: SAME DAY 24 HR 48 HR STANDARD

72 HR 5 DAYS STANDARD

SPECIAL INSTRUCTIONS:
Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com;
Provide EDD of sample results

REQUESTED ANALYSES
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION		PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)																																								
		DATE	TIME			Unpreserved	Field Filtered																																																					
	IX-5-20200625	6-23	1117	Water	2			X																																																				
	IX-6-20200623		1120	Water	2			X																																																				
	IX-7-20200625		1123	Water	2			X																																																				
	IX-8-20200623		1126	Water	2			X																																																				
	MB-INF-20200623		1129	Water	10			X																																																				
	MB-INF-DUP-			Water	10																																																							
	FB-20200623		1132	Water	1																																																							

Received by: (Signature) [Signature] Date: 6-23-20 Time: 1446

Relinquished by: (Signature) [Signature]

Received by: (Signature) [Signature] Date: 6-23-20 Time: 1446

Relinquished by: (Signature) [Signature]



INTERNAL CHAIN OF CUSTODY RECORD

Eaton Analytical

EEA Folder Number: 50488

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6698 (Observation = 6.6 °C) (Corr. Factor = 0.3) (Final = 6.3 °C)

TYPE OF ICE: Real Synthetic No. Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: Walk-In

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm
6613	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

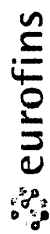
RECEIVED BY: Y. Allen SIGNATURE

PRINT NAME: Paul Mills

COMPANY/TITLE: Eurofins Eaton Analytical

DATE: 6-23-20

TIME: 1440



Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
 Monrovia, California 91016-3629
 (626) 386-1100 FAX (866) 988-3757

Created Date & Time: 5/27/2020 6:04:42PM

Note: Sampler Please return this paper with your samples

Kit #: 264841

Client ID: WRD

Project Code: 0250000 Bottle Orders
 Group Name: WRD Pilot [Set#1]
 PO#/JOB#:

Description: WRD Pilot Set #1
 Shipping Method: Pickup by client

Created By: Anisha Zachariah - [ZR4B]
 Deliver By: 06/08/2020
 STG: Bottle Orders
 Ice Type: G

Ship Sample Kits to
 GSI Environmental Inc.
 Attn: Robert Torres
 Phone: 951-616-8406

Send Report to
 Water Replenishment District
 4040 Paramount Blvd.
 Lakewood, CA 90712
 Attn: Joseph Liles
 Phone: 562-275-4226

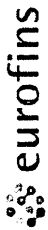
Billing Address
 Water Replenishment District
 Attn: Eurofins Calscience
 Water Replenishment District
 4040 Paramount Blvd
 Lakewood, CA 90712
 Attn: Brian Partington
 Phone: 562-275-4249
 Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
2	Total Organic Carbon	2	UN1830
2	Hexavalent Chromium (Dissolved)	2	
2	@ANIONS48, Chloride, Sulfate	2	
2	Perchlorate	2	
2	Oil and Grease by 1664(subbed)	4	
2	Alkalinity in CaCO3 units	2	
4	@537.1	8	
2	@VOASDWA	6	UN1789
2	Arsenic Total ICAP/MS, Calcium Total ICAP, Magnesium Total ICAP, Manganese Total ICAP/MS, Potassium Total ICAP, Sodium Total ICAP, Uranium by ICPMS as pCi/L, Uranium ICAP/MS	2	UN2031
2	Total Dissolved Solid (TDS), Total Suspended Solids (TSS)	2	

Sum Bottles: 32

Sum Tests: 22

Comments



Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (866) 988-3757

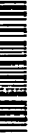
Created Date & Time: 5/27/2020 6:04:42PM

Note: Sampler Please return this paper with your samples

Client ID: WRD



Kit #: 264841



Project Code: 0250000 Bottle Orders

Group Name: WRD Pilot [Set#1]

PO#/JOB#:

Description: WRD Pilot Set #1

Shipping Method: Pickup by client

Created By: Anisha Zachariah - [ZR4B]

Deliver By: 06/08/2020

STG: Bottle Orders

Ice Type: G

Ship Sample Kits to
GSI Environmental Inc.

Attn: Robert Torres
Phone: 951-616-8406

Send Report to
Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712

Attn: Joseph Liles
Phone: 562-275-4226

Billing Address
Water Replenishment District

Attn: Eurofins Calscience

Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712

Attn: Brian Partington
Phone: 562-275-4249
Fax: 562-921-6101

of

Sample Tests

Bottle Qty - Type: [preservative information]

Total

UN DOT #

SHIPPING:

- CLIENT P/U TUESDAY, JUNE 9TH MORNING
- PACKAGE IN 2 LARGE COOLERS

GSI SAMPLER:

- PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES.
- NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP.

ASM:

- *Please also send invoices to Miae Jeon (mjeon@gsi-net.com)
- *Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pegalvin@gsi-net.com, and rdtorres@gsi-net.com.

Code

Status

Date Shipped

Via

Tracking #

of Coolers

Prepared By

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 877883
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove,
CAELAP 2944 exp 9-30-2020

Flags Legend:

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/23/2020 1440

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202006230611	<u>IX-7-20200623</u>				
06/26/2020 15:54	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
	202006230613	<u>MB-INF-20200623</u>				
06/26/2020 16:15	Alkalinity in CaCO3 units		170		mg/L	2.0
07/01/2020 17:50	Arsenic Total ICAP/MS		2.0	10	ug/L	1.0
06/24/2020 13:03	Calcium Total ICAP		63		mg/L	1.0
06/23/2020 17:50	Chloride		54	250	mg/L	2.5
06/26/2020 12:38	Hexavalent chromium(Dissolved)		0.42		ug/L	0.020
06/24/2020 13:03	Magnesium Total ICAP		12		mg/L	0.10
06/23/2020 17:50	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
06/23/2020 17:50	Nitrate as NO3 (calc)		11	45	mg/L	2.2
06/29/2020 13:11	Oil and Grease by 1664(subbed)		3.91		mg/L	0.98
06/26/2020 18:48	Perfluorobutanesulfonic acid (PFBS)		0.0086		ug/L	0.0020
06/26/2020 18:48	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
06/26/2020 18:48	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
06/26/2020 18:48	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
06/26/2020 18:48	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
06/26/2020 18:48	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
06/26/2020 18:48	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
06/24/2020 13:03	Potassium Total ICAP		4.0		mg/L	1.0
06/24/2020 13:03	Sodium Total ICAP		52		mg/L	1.0
06/23/2020 17:50	Sulfate		80	250	mg/L	2.5
06/25/2020 23:16	Total Dissolved Solids (TDS)		390	500	mg/L	10
06/24/2020 16:01	Total Hardness as CaCO3 by ICP (calc)		210		mg/L	3.0
06/23/2020 17:50	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
06/25/2020 08:20	Total Organic Carbon		0.68		mg/L	0.30
06/26/2020 15:16	Uranium by ICPMS as pCi/L		1.4		pCi/L	0.70
06/26/2020 03:25	Uranium ICAP/MS		2.1	30	ug/L	1.0

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/23/2020 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-5-20200623 (202006230605)					Sampled on 06/23/2020 1105				
EPA 537.1 - EPA Method 537.1									
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	13C2-PFDA	92	%		1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	13C2-PFHxA	94	%		1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	13C3-HFPO-DA	92	%		1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	d3-NMeFOSAA	112	%		1
06/25/20	06/26/20 17:39	1257571	1258385	(EPA 537.1)	d5-NEtFOSAA	92	%		1

GAC-6-20200623 (202006230606)					Sampled on 06/23/2020 1108				
EPA 537.1 - EPA Method 537.1									
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/23/2020 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	13C2-PFDA	96	%		1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	13C2-PFHxA	97	%		1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	13C3-HFPO-DA	92	%		1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	d3-NMeFOSAA	112	%		1
06/25/20	06/26/20 17:59	1257571	1258385	(EPA 537.1)	d5-NEtFOSAA	91	%		1

GAC-7-20200623 (202006230607)

Sampled on 06/23/2020 1111

EPA 537.1 - EPA Method 537.1

06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/23/2020 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	13C2-PFDA	97	%		1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	13C2-PFHxA	98	%		1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	13C3-HFPO-DA	93	%		1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	d3-NMeFOSAA	112	%		1
06/25/20	06/26/20 18:10	1257571	1258385	(EPA 537.1)	d5-NEtFOSAA	89	%		1

GAC-8-20200623 (202006230608)

Sampled on 06/23/2020 1114

EPA 537.1 - EPA Method 537.1

06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/23/2020 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	13C2-PFDA	96	%		1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	13C2-PFHxA	96	%		1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	13C3-HFPO-DA	90	%		1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	d3-NMeFOSAA	112	%		1
06/25/20	06/26/20 18:20	1257571	1258385	(EPA 537.1)	d5-NEtFOSAA	93	%		1

IX-5-20200623 (202006230609)

Sampled on 06/23/2020 1117

EPA 537.1 - EPA Method 537.1

06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/23/2020 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	13C2-PFDA	98	%		1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	13C2-PFHxA	98	%		1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	13C3-HFPO-DA	93	%		1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	d3-NMeFOSAA	115	%		1
06/25/20	06/26/20 18:29	1257571	1258385	(EPA 537.1)	d5-NEtFOSAA	94	%		1

IX-6-20200623 (202006230610)

Sampled on 06/23/2020 1120

EPA 537.1 - EPA Method 537.1

06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	13C2-PFDA	97	%		1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	13C2-PFHxA	95	%		1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	13C3-HFPO-DA	91	%		1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	d3-NMeFOSAA	113	%		1

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Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/23/2020 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/25/20	06/26/20 18:39	1257571	1258385	(EPA 537.1)	d5-NEtFOSAA	92	%		1
IX-7-20200623 (202006230611)					Sampled on 06/23/2020 1123				
EPA 537.1 - EPA Method 537.1									
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	13C2-PFDA	96	%		1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	13C2-PFHxA	100	%		1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	13C3-HFPO-DA	95	%		1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	d3-NMeFOSAA	106	%		1
06/25/20	06/26/20 15:54	1257571	1258385	(EPA 537.1)	d5-NEtFOSAA	94	%		1

IX-8-20200623 (202006230612)

Sampled on 06/23/2020 1126

EPA 537.1 - EPA Method 537.1

06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/23/2020 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	13C2-PFDA	96	%		1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	13C2-PFHxA	98	%		1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	13C3-HFPO-DA	92	%		1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	d3-NMeFOSAA	108	%		1
06/25/20	06/26/20 16:13	1257571	1258385	(EPA 537.1)	d5-NEtFOSAA	89	%		1

MB-INF-20200623 (202006230613)

Sampled on 06/23/2020 1129

EPA 200.8 - ICPMS Metals

06/24/20	07/01/20 17:50	1257285	1258986	(EPA 200.8)	Arsenic Total ICAP/MS	2.0	ug/L	1.0	1
06/24/20	06/26/20 03:25	1257285	1257866	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
06/24/20	06/26/20 03:25	1257285	1257866	(EPA 200.8)	Uranium ICAP/MS	2.1	ug/L	1.0	1

EPA 200.7 - ICP Metals

06/24/20	06/24/20 13:03	1257285	1257037	(EPA 200.7)	Calcium Total ICAP	63	mg/L	1.0	1
06/24/20	06/24/20 13:03	1257285	1257037	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
06/24/20	06/24/20 13:03	1257285	1257037	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1
06/24/20	06/24/20 13:03	1257285	1257037	(EPA 200.7)	Potassium Total ICAP	4.0	mg/L	1.0	1
06/24/20	06/24/20 13:03	1257285	1257037	(EPA 200.7)	Sodium Total ICAP	52	mg/L	1.0	1

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Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/23/2020 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
SM 5310C - Total Organic Carbon									
	06/25/20 08:20		1257657	(SM 5310C)	Total Organic Carbon	0.68	mg/L	0.30	1
EPA 200.8 - Uranium by ICPMS as pCi/L									
	06/26/20 15:16			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.4 (c)	pCi/L	0.70	1
SM 2340B - Total Hardness as CaCO3 by ICP									
	06/24/20 16:01			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	210 (c)	mg/L	3.0	1
Default - Nitrite as NO2 (calc)									
	06/24/20 12:31			(Default)	Nitrite as NO2 (calc)	ND (c)	mg/L	0.16	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
	06/26/20 12:38		1258080	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.42	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	06/23/20 17:50		1257172	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
	06/23/20 17:50		1257172	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
	06/23/20 17:50		1257172	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	06/23/20 17:50		1257172	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	06/23/20 17:50		1257166	(EPA 300.0)	Chloride	54	mg/L	2.5	5
	06/23/20 17:50		1257166	(EPA 300.0)	Sulfate	80	mg/L	2.5	5
EPA 314.0 - Perchlorate									
	06/25/20 15:33	(1)	1257604	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0086	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1

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06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	13C2-PFDA	95	%		1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	13C2-PFHxA	91	%		1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	13C3-HFPO-DA	85	%		1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	d3-NMeFOSAA	120	%		1
06/25/20	06/26/20 18:48	1257571	1258385	(EPA 537.1)	d5-NEtFOSAA	88	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	06/29/20 13:11			(EPA 1664)	Oil and Grease by 1664(subbed)	3.91	mg/L	0.98	1
EPA 524.2 - Volatile Organics by GCMS									
07/02/20	07/02/20 19:58	1259290	1259291	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LM)	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1

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07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1

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07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
07/02/20	07/02/20 19:58	1259290	1259291	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
07/02/20	07/02/20 19:58	1259290	1259291	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
07/02/20	07/02/20 19:58	1259290	1259291	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	1,2-Dichloroethane-d4	112	%		1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	4-Bromofluorobenzene	92	%		1
07/01/20	07/02/20 05:01	1259061	1259066	(EPA 524.2)	Toluene-d8	91	%		1
SM 2320B - Alkalinity in CaCO3 units									
	06/26/20 16:15		1257946	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
06/25/20	06/25/20 23:16	1257873	1257879	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	390	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	06/29/20 20:22		1258261	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

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Water Replenishment District

ICP Metals

Prep Batch: 1257285 Analytical Batch: 1257037
 202006230613 MB-INF-20200623

Analysis Date: 06/24/2020
 Analyzed by: NINA

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1257166
 202006230613 MB-INF-20200623

Analysis Date: 06/23/2020
 Analyzed by: HL7J

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1257172
 202006230613 MB-INF-20200623

Analysis Date: 06/23/2020
 Analyzed by: HL7J

Perchlorate

Analytical Batch: 1257604
 202006230613 MB-INF-20200623

Analysis Date: 06/25/2020
 Analyzed by: H5VG

Total Organic Carbon

Analytical Batch: 1257657
 202006230613 MB-INF-20200623

Analysis Date: 06/25/2020
 Analyzed by: ZS6I

ICPMS Metals

Prep Batch: 1257285 Analytical Batch: 1257866
 202006230613 MB-INF-20200623

Analysis Date: 06/26/2020
 Analyzed by: AZS

Total Dissolved Solids (TDS)

Prep Batch: 1257873 Analytical Batch: 1257879
 202006230613 MB-INF-20200623

Analysis Date: 06/25/2020
 Analyzed by: TJ52

Alkalinity in CaCO3 units

Analytical Batch: 1257946
 202006230613 MB-INF-20200623

Analysis Date: 06/26/2020
 Analyzed by: ZB2Z

Hexavalent chromium(Dissolved)

Analytical Batch: 1258080
 202006230613 MB-INF-20200623

Analysis Date: 06/26/2020
 Analyzed by: TLH

Total Suspended Solids (TSS)

Analytical Batch: 1258261
 202006230613 MB-INF-20200623

Analysis Date: 06/29/2020
 Analyzed by: TJ52

EPA Method 537.1

Prep Batch: 1257571 Analytical Batch: 1258385
 202006230605 GAC-5-20200623
 202006230606 GAC-6-20200623
 202006230607 GAC-7-20200623
 202006230608 GAC-8-20200623
 202006230609 IX-5-20200623
 202006230610 IX-6-20200623
 202006230611 IX-7-20200623
 202006230612 IX-8-20200623

Analysis Date: 06/26/2020
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

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Water Replenishment District

202006230613 MB-INF-20200623

Analyzed by: KAM

ICPMS Metals

Prep Batch: 1257285 Analytical Batch: 1258986

Analysis Date: 07/01/2020

202006230613 MB-INF-20200623

Analyzed by: URDE

Volatile Organics by GCMS

Prep Batch: 1259061 Analytical Batch: 1259066

Analysis Date: 07/02/2020

202006230613 MB-INF-20200623

Analyzed by: FX5E

Volatile Organics by GCMS

Prep Batch: 1259290 Analytical Batch: 1259291

Analysis Date: 07/02/2020

202006230613 MB-INF-20200623

Analyzed by: TR7W

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
ICP Metals by EPA 200.7									
Analytical Batch: 1257037					Analysis Date: 06/24/2020				
LCS1	Calcium Total ICAP		50	49.9	mg/L	100	(85-115)		
LCS2	Calcium Total ICAP		50	49.9	mg/L	100	(85-115)	20	0.0
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.999	mg/L	100	(50-150)		
MS_202005260400	Calcium Total ICAP	99	50	143	mg/L	87	(70-130)		
MS2_202006230496	Calcium Total ICAP	89	50	129	mg/L	80	(70-130)		
MSD_202005260400	Calcium Total ICAP	99	50	144	mg/L	90	(70-130)	20	0.84
MSD2_202006230496	Calcium Total ICAP	89	50	129	mg/L	80	(70-130)	20	0.17
LCS1	Iron Total ICAP		5	5.00	mg/L	100	(85-115)		
LCS2	Iron Total ICAP		5	4.99	mg/L	100	(85-115)	20	0.20
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0207	mg/L	103	(50-150)		
MS_202005260400	Iron Total ICAP	ND	5	4.97	mg/L	99	(70-130)		
MS2_202006230496	Iron Total ICAP	ND	5	5.01	mg/L	100	(70-130)		
MSD_202005260400	Iron Total ICAP	ND	5	5.03	mg/L	101	(70-130)	20	1.3
MSD2_202006230496	Iron Total ICAP	ND	5	4.98	mg/L	100	(70-130)	20	0.67
LCS1	Magnesium Total ICAP		20	19.7	mg/L	99	(85-115)		
LCS2	Magnesium Total ICAP		20	19.6	mg/L	98	(85-115)	20	0.0
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0966	mg/L	97	(50-150)		
MS_202005260400	Magnesium Total ICAP	31	20	49.5	mg/L	93	(70-130)		
MS2_202006230496	Magnesium Total ICAP	30	20	47.8	mg/L	86	(70-130)		
MSD_202005260400	Magnesium Total ICAP	31	20	50.0	mg/L	96	(70-130)	20	1.1
MSD2_202006230496	Magnesium Total ICAP	30	20	47.6	mg/L	85	(70-130)	20	0.40
LCS1	Potassium Total ICAP		20	20.0	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	19.9	mg/L	100	(85-115)	20	0.50
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.768	mg/L	77	(50-150)		
MS_202005260400	Potassium Total ICAP	1.8	20	23.2	mg/L	106	(70-130)		
MS2_202006230496	Potassium Total ICAP	8.9	20	29.5	mg/L	103	(70-130)		
MSD_202005260400	Potassium Total ICAP	1.8	20	23.4	mg/L	108	(70-130)	20	1.0
MSD2_202006230496	Potassium Total ICAP	8.9	20	29.4	mg/L	103	(70-130)	20	0.40
LCS1	Sodium Total ICAP		50	49.6	mg/L	99	(85-115)		
LCS2	Sodium Total ICAP		50	49.4	mg/L	99	(85-115)	20	0.40
MBLK	Sodium Total ICAP			<0.5	mg/L				

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Sodium Total ICAP		1	0.984	mg/L	98	(50-150)		
MS_202005260400	Sodium Total ICAP	35	50	81.6	mg/L	94	(70-130)		
MS2_202006230496	Sodium Total ICAP	55	50	97.3	mg/L	85	(70-130)		
MSD_202005260400	Sodium Total ICAP	35	50	82.1	mg/L	94	(70-130)	20	0.55
MSD2_202006230496	Sodium Total ICAP	55	50	96.7	mg/L	84	(70-130)	20	0.58

Chloride, Sulfate by EPA 300.0 by EPA 300.0
Analytical Batch: 1257166

Analysis Date: 06/23/2020

LCS1	Chloride		25	26.9	mg/L	108	(90-110)		
LCS2	Chloride		25	26.7	mg/L	107	(90-110)	20	0.75
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.463	mg/L	93	(50-150)		
MS_202006230042	Chloride	42	65	116	mg/L	117	(80-120)		
MS_202006230539	Chloride	30	26	58.4	mg/L	115	(80-120)		
MSD_202006230042	Chloride	42	65	116	mg/L	117	(80-120)	20	0.24
MSD_202006230539	Chloride	30	26	58.6	mg/L	116	(80-120)	20	0.42
LCS1	Sulfate		50	52.7	mg/L	105	(90-110)		
LCS2	Sulfate		50	52.5	mg/L	105	(90-110)	20	0.38
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.00	mg/L	100	(50-150)		
MRLLW	Sulfate		0.25	0.254	mg/L	101	(50-150)		
MS_202006230042	Sulfate	100	125	245	mg/L	113	(80-120)		
MS_202006230539	Sulfate	51	50	106	mg/L	111	(80-120)		
MSD_202006230042	Sulfate	100	125	244	mg/L	112	(80-120)	20	0.28
MSD_202006230539	Sulfate	51	50	106	mg/L	112	(80-120)	20	0.009

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Nitrate, Nitrite by EPA 300.0 by EPA 300.0
Analytical Batch: 1257172

Analysis Date: 06/23/2020

LCS1	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0486	mg/L	97	(50-150)		
MS_202006230042	Nitrate as Nitrogen by IC	ND	6.5	6.85	mg/L	110	(80-120)		
MS_202006230539	Nitrate as Nitrogen by IC	11	2.6	13.3	mg/L	103	(80-120)		
MSD_202006230042	Nitrate as Nitrogen by IC	ND	6.5	6.81	mg/L	109	(80-120)	20	0.53
MSD_202006230539	Nitrate as Nitrogen by IC	11	2.6	13.4	mg/L	105	(80-120)	20	0.47
LCS1	Nitrite Nitrogen by IC		1	1.03	mg/L	103	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.03	mg/L	103	(90-110)	20	0.0

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0509	mg/L	102	(50-150)		
MS_202006230042	Nitrite Nitrogen by IC	ND	2.5	2.68	mg/L	107	(80-120)		
MS_202006230539	Nitrite Nitrogen by IC	ND	1	1.05	mg/L	105	(80-120)		
MSD_202006230042	Nitrite Nitrogen by IC	ND	2.5	2.67	mg/L	107	(80-120)	20	0.48
MSD_202006230539	Nitrite Nitrogen by IC	ND	1	1.07	mg/L	107	(80-120)	20	1.9

Perchlorate by EPA 314.0

Analytical Batch: 1257604

Analysis Date: 06/25/2020

LCS1	Perchlorate		25	25.2	ug/L	101	(85-115)		
LCS2	Perchlorate		25	25.0	ug/L	100	(85-115)	15	0.80
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.79	ug/L	95	(75-125)		
MS_202006230614	Perchlorate	180	50	ND	ug/L	<u>70</u>	(80-120)		
MSD_202006230614	Perchlorate	180	50	ND	ug/L	<u>70</u>	(80-120)	15	0.0093

Total Organic Carbon by SM 5310C

Analytical Batch: 1257657

Analysis Date: 06/25/2020

LCS1	Total Organic Carbon		5	4.98	mg/L	100	(90-110)		
LCS2	Total Organic Carbon		5	4.89	mg/L	98	(90-110)	20	1.8
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.241	mg/L	120	(50-150)		
MS_202006231028	Total Organic Carbon	0.83	4	4.55	mg/L	93	(80-120)		
MSD_202006231028	Total Organic Carbon	0.83	4	4.59	mg/L	94	(80-120)	20	0.96

ICPMS Metals by EPA 200.8

Analytical Batch: 1257866

Analysis Date: 06/26/2020

LCS1	Arsenic Total ICAP/MS		50	48.4	ug/L	97	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	50.0	ug/L	100	(85-115)	20	3.3
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MS_202006220177	Arsenic Total ICAP/MS	1.4	50	52.4	ug/L	102	(70-130)		
MS2_202006230764	Arsenic Total ICAP/MS	4.7	50	56.1	ug/L	103	(70-130)		
MSD_202006220177	Arsenic Total ICAP/MS	1.4	50	56.0	ug/L	109	(70-130)	20	6.5
MSD2_202006230764	Arsenic Total ICAP/MS	4.7	50	50.8	ug/L	92	(70-130)	20	9.9
LCS1	Manganese Total ICAP/MS		100	100	ug/L	101	(85-115)		
LCS2	Manganese Total ICAP/MS		100	102	ug/L	102	(85-115)	20	0.99
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.00	ug/L	100	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202006220177	Manganese Total ICAP/MS	ND	100	99.6	ug/L	99	(70-130)		
MS2_202006230764	Manganese Total ICAP/MS	ND	100	100	ug/L	100	(70-130)		
MSD_202006220177	Manganese Total ICAP/MS	ND	100	122	ug/L	122	(70-130)	20	20
MSD2_202006230764	Manganese Total ICAP/MS	ND	100	95.8	ug/L	96	(70-130)	20	4.8
LCS1	Uranium ICAP/MS		50	47.9	ug/L	96	(85-115)		
LCS2	Uranium ICAP/MS		50	49.6	ug/L	99	(85-115)	20	3.5
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.940	ug/L	94	(50-150)		
MS_202006220177	Uranium ICAP/MS	11	50	61.9	ug/L	102	(70-130)		
MS2_202006230764	Uranium ICAP/MS	ND	50	51.2	ug/L	101	(70-130)		
MSD_202006220177	Uranium ICAP/MS	11	50	71.3	ug/L	121	(70-130)	20	14
MSD2_202006230764	Uranium ICAP/MS	ND	50	47.7	ug/L	95	(70-130)	20	7.0

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1257879

Analysis Date: 06/25/2020

DUP_202006100011	Total Dissolved Solid (TDS)	900		916	mg/L		(0-10)	10	1.3
DUP_202006230613	Total Dissolved Solid (TDS)	390		396	mg/L		(0-10)	10	0.51
LCS1	Total Dissolved Solid (TDS)		175	178	mg/L	102	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	692	mg/L	99	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	7.00	mg/L	70	(50-150)		

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1257946

Analysis Date: 06/26/2020

LCS1	Alkalinity in CaCO3 units		100	99.0	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.7	mg/L	100	(90-110)	20	0.71
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.96	mg/L	98	(50-150)		
MS_202006250244	Alkalinity in CaCO3 units	60	100	162	mg/L	103	(80-120)		
MS_202006250266	Alkalinity in CaCO3 units	61	100	165	mg/L	104	(80-120)		
MSD_202006250244	Alkalinity in CaCO3 units	60	100	162	mg/L	103	(80-120)	20	0.25
MSD_202006250266	Alkalinity in CaCO3 units	61	100	165	mg/L	104	(80-120)	20	0.036

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1258080

Analysis Date: 06/26/2020

LCS1	Hexavalent chromium(Dissolved)		2	2.02	ug/L	101	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	2.02	ug/L	101	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0151	ug/L	76	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202005210456	Hexavalent chromium(Dissolved)	0.52	2	2.62	ug/L	105	(90-110)		
MS_202006231085	Hexavalent chromium(Dissolved)	0.86	2	2.97	ug/L	106	(90-110)		
MSD_202005210456	Hexavalent chromium(Dissolved)	0.52	2	2.63	ug/L	105	(90-110)	20	0.40
MSD_202006231085	Hexavalent chromium(Dissolved)	0.86	2	2.96	ug/L	105	(90-110)	20	0.47

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1258261

Analysis Date: 06/29/2020

DUP_202005200003	Total Suspended Solids (TSS)	280		272	mg/L		(0-10)	10	4.3
DUP_202005200040	Total Suspended Solids (TSS)	530		552	mg/L		(0-10)	10	3.7
LCS1	Total Suspended Solids (TSS)		175	166	mg/L	95	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	160	mg/L	91	(71-107)	20	3.7
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	10.0	mg/L	100	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1257571 Analytical Batch: 1258385

Analysis Date: 06/26/2020

DUP_202006230612	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0450	ug/L	96	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0437	ug/L	93	(70-130)	30	2.9
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00181	ug/L	97	(50-150)		
MS2_202006230611	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0416	ug/L	88	(70-130)		
DUP_202006230612	13C2-PFDA (S)			89.4	%	89	(70-130)		
LCS3	13C2-PFDA (S)		100	93.5	%	93	(70-130)		
LCS4	13C2-PFDA (S)		100	92.4	%	92	(70-130)		
MBLK	13C2-PFDA (S)			90.2	%	90	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	92.3	%	92	(70-130)		
MS2_202006230611	13C2-PFDA (S)		100	93.4	%	93	(70-130)		
DUP_202006230612	13C2-PFHxA (S)			94.7	%	95	(70-130)		
LCS3	13C2-PFHxA (S)		100	97.4	%	97	(70-130)		
LCS4	13C2-PFHxA (S)		100	94.8	%	95	(70-130)		
MBLK	13C2-PFHxA (S)			95.6	%	96	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	95.4	%	95	(70-130)		
MS2_202006230611	13C2-PFHxA (S)		100	97.2	%	97	(70-130)		
DUP_202006230612	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			105	%	105	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202006230611	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
DUP_202006230612	13C3-HFPO-DA (S)			91.1	%	91	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	93.6	%	94	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	90.4	%	90	(70-130)		
MBLK	13C3-HFPO-DA (S)			89.4	%	89	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	92.3	%	92	(70-130)		
MS2_202006230611	13C3-HFPO-DA (S)		100	92.7	%	93	(70-130)		
DUP_202006230612	13C4-PFOS- IS#2 (I)			100	%	100	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	100	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MS2_202006230611	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
DUP_202006230612	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0479	ug/L	99	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0469	ug/L	97	(70-130)	30	2.1
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00216	ug/L	114	(50-150)		
MS2_202006230611	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0457	ug/L	94	(70-130)		
DUP_202006230612	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0456	ug/L	98	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0448	ug/L	96	(70-130)	30	1.8
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00198	ug/L	106	(50-150)		
MS2_202006230611	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0439	ug/L	94	(70-130)		
DUP_202006230612	d3-NMeFOSAA (I)			108	%	108	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MBLK	d3-NMeFOSAA (I)			107	%	107	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MS2_202006230611	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
DUP_202006230612	d5-NEtFOSAA (S)			87.4	%	87	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	86.6	%	87	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	85.1	%	85	(70-130)		
MBLK	d5-NEtFOSAA (S)			87.1	%	87	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	87.2	%	87	(70-130)		
MS2_202006230611	d5-NEtFOSAA (S)		100	88.2	%	88	(70-130)		
DUP_202006230612	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		

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Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0485	ug/L	97	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0467	ug/L	93	(70-130)	30	3.8
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00210	ug/L	105	(50-150)		
MS2_202006230611	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0457	ug/L	91	(70-130)		
DUP_202006230612	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0481	ug/L	96	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0457	ug/L	91	(70-130)	30	5.1
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00204	ug/L	102	(50-150)		
MS2_202006230611	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0448	ug/L	90	(70-130)		
DUP_202006230612	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0469	ug/L	94	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0467	ug/L	93	(70-130)	30	0.43
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00206	ug/L	103	(50-150)		
MS2_202006230611	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0457	ug/L	91	(70-130)		
DUP_202006230612	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0443	ug/L	100	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0453	ug/L	102	(70-130)	30	2.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00196	ug/L	111	(50-150)		
MS2_202006230611	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0423	ug/L	95	(70-130)		
DUP_202006230612	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0499	ug/L	100	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0487	ug/L	97	(70-130)	30	2.4
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00219	ug/L	110	(50-150)		
MS2_202006230611	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0478	ug/L	96	(70-130)		
DUP_202006230612	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0512	ug/L	102	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0480	ug/L	96	(70-130)	30	6.2
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00213	ug/L	106	(50-150)		
MS2_202006230611	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0466	ug/L	93	(70-130)		
DUP_202006230612	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0531	ug/L	106	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0525	ug/L	105	(70-130)	30	1.1

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00236	ug/L	118	(50-150)		
MS2_202006230611	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0488	ug/L	97	(70-130)		
DUP_202006230612	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0471	ug/L	103	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0478	ug/L	105	(70-130)	30	1.7
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00213	ug/L	117	(50-150)		
MS2_202006230611	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0452	ug/L	99	(70-130)		
DUP_202006230612	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0505	ug/L	101	(70-130)	30	1
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00224	ug/L	112	(50-150)		
MS2_202006230611	Perfluorohexanoic acid (PFHxA)	0.0030	0.05	0.0499	ug/L	94	(70-130)		
DUP_202006230612	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0488	ug/L	98	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0482	ug/L	96	(70-130)	30	1.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202006230611	Perfluorononanoic acid (PFNA)	ND	0.05	0.0489	ug/L	98	(70-130)		
DUP_202006230612	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0458	ug/L	99	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0460	ug/L	99	(70-130)	30	0.44
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00205	ug/L	111	(50-150)		
MS2_202006230611	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0444	ug/L	96	(70-130)		
DUP_202006230612	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0525	ug/L	105	(70-130)	30	0.19
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00236	ug/L	118	(50-150)		
MS2_202006230611	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0496	ug/L	99	(70-130)		
DUP_202006230612	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0575	ug/L	115	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0540	ug/L	108	(70-130)	30	6.3
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00255	ug/L	127	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202006230611	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0499	ug/L	99	(70-130)		
DUP_202006230612	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0475	ug/L	95	(70-130)	30	7.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00201	ug/L	101	(50-150)		
MS2_202006230611	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0457	ug/L	91	(70-130)		
DUP_202006230612	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0467	ug/L	94	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0472	ug/L	94	(70-130)	30	1.1
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00202	ug/L	101	(50-150)		
MS2_202006230611	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0455	ug/L	91	(70-130)		

ICPMS Metals by EPA 200.8

Analytical Batch: 1258986

Analysis Date: 07/01/2020

LCS1	Arsenic Total ICAP/MS		50	47.9	ug/L	96	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.3	ug/L	97	(85-115)	20	0.83
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.23	ug/L	123	(50-150)		
MS_202006220226	Arsenic Total ICAP/MS	ND	50	53.2	ug/L	105	(70-130)		
MS2_202006240262	Arsenic Total ICAP/MS	1.1	50	59.0	ug/L	116	(70-130)		
MSD_202006220226	Arsenic Total ICAP/MS	ND	50	53.3	ug/L	106	(70-130)	20	0.28
MSD2_202006240262	Arsenic Total ICAP/MS	1.1	50	61.9	ug/L	122	(70-130)	20	4.8
LCS1	Manganese Total ICAP/MS		100	102	ug/L	103	(85-115)		
LCS2	Manganese Total ICAP/MS		100	100	ug/L	100	(85-115)	20	3.0
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.04	ug/L	102	(50-150)		
MS_202006220226	Manganese Total ICAP/MS	ND	100	102	ug/L	102	(70-130)		
MS2_202006240262	Manganese Total ICAP/MS	ND	100	98.9	ug/L	98	(70-130)		
MSD_202006220226	Manganese Total ICAP/MS	ND	100	98.3	ug/L	98	(70-130)	20	3.5
MSD2_202006240262	Manganese Total ICAP/MS	ND	100	98.5	ug/L	98	(70-130)	20	0.43

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1259066

Analysis Date: 07/01/2020

LCS1	1,1,1,2-Tetrachloroethane		5	3.56	ug/L	71	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	3.43	ug/L	69	(70-130)	20	3.7
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.340	ug/L	68	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,1,1-Trichloroethane		5	4.90	ug/L	98	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.66	ug/L	93	(70-130)	20	5.0
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	4.77	ug/L	95	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.87	ug/L	97	(70-130)	20	2.1
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.77	ug/L	95	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.25	ug/L	85	(70-130)	20	12
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1-Dichloroethane		5	5.63	ug/L	113	(70-130)		
LCS2	1,1-Dichloroethane		5	5.24	ug/L	105	(70-130)	20	7.2
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.41	ug/L	108	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.18	ug/L	104	(70-130)	20	4.3
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1-Dichloropropene		5	5.03	ug/L	101	(70-130)		
LCS2	1,1-Dichloropropene		5	4.65	ug/L	93	(70-130)	20	7.8
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.87	ug/L	97	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.67	ug/L	93	(70-130)	20	4.2
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.760	ug/L	152	(50-150)		
LCS1	1,2,3-Trichloropropane		5	4.56	ug/L	91	(70-130)		
LCS2	1,2,3-Trichloropropane		5	4.64	ug/L	93	(70-130)	20	1.7
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.70	ug/L	94	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.54	ug/L	91	(70-130)	20	3.5
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.610	ug/L	122	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.77	ug/L	95	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.61	ug/L	92	(70-130)	20	3.4

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.600	ug/L	120	(50-150)		
LCS1	1,2-Dichloroethane		5	4.95	ug/L	99	(70-130)		
LCS2	1,2-Dichloroethane		5	5.10	ug/L	102	(70-130)	20	3.0
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	108	%	108	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	108	%	108	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			111	%	111	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	107	%	107	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	106	%	106	(70-130)		
LCS1	1,2-Dichloropropane		5	5.04	ug/L	101	(70-130)		
LCS2	1,2-Dichloropropane		5	4.67	ug/L	93	(70-130)	20	7.6
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.62	ug/L	92	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.52	ug/L	90	(70-130)	20	2.2
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.370	ug/L	74	(50-150)		
LCS1	1,3-Dichloropropane		5	4.82	ug/L	96	(70-130)		
LCS2	1,3-Dichloropropane		5	4.65	ug/L	93	(70-130)	20	3.6
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.480	ug/L	96	(50-150)		
LCS1	2,2-Dichloropropane		5	4.65	ug/L	93	(70-130)		
LCS2	2,2-Dichloropropane		5	4.27	ug/L	85	(70-130)	20	8.5
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.520	ug/L	104	(50-150)		
LCS1	2-Butanone (MEK)		50	51.3	ug/L	103	(70-130)		
LCS2	2-Butanone (MEK)		50	48.4	ug/L	97	(70-130)	20	5.8
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	4.86	ug/L	97	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	93.0	%	93	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	92.8	%	93	(70-130)		
MBLK	4-Bromofluorobenzene (S)			90.0	%	90	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	87.0	%	87	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	84.6	%	85	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	50.3	ug/L	101	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	48.0	ug/L	96	(70-130)	20	4.5

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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	5.74	ug/L	115	(50-150)		
LCS1	Benzene		5	5.15	ug/L	103	(70-130)		
LCS2	Benzene		5	5.10	ug/L	102	(70-130)	20	0.98
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Bromobenzene		5	4.69	ug/L	94	(70-130)		
LCS2	Bromobenzene		5	4.34	ug/L	87	(70-130)	20	7.8
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Bromochloromethane		5	5.22	ug/L	104	(70-130)		
LCS2	Bromochloromethane		5	4.86	ug/L	97	(70-130)	20	7.1
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	Bromodichloromethane		5	4.62	ug/L	92	(70-130)		
LCS2	Bromodichloromethane		5	4.36	ug/L	87	(70-130)	20	5.8
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.430	ug/L	86	(50-150)		
LCS1	Bromoethane		5	5.69	ug/L	114	(70-130)		
LCS2	Bromoethane		5	5.50	ug/L	110	(70-130)	20	3.4
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.570	ug/L	114	(50-150)		
LCS1	Bromoform		5	4.46	ug/L	89	(70-130)		
LCS2	Bromoform		5	4.42	ug/L	88	(70-130)	20	0.90
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.570	ug/L	114	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	6.18	ug/L	124	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.72	ug/L	114	(70-130)	20	7.7
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.580	ug/L	116	(50-150)		
LCS1	Carbon disulfide		5	5.62	ug/L	112	(70-130)		
LCS2	Carbon disulfide		5	5.41	ug/L	108	(70-130)	20	3.8
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.510	ug/L	102	(50-150)		
LCS1	Carbon Tetrachloride		5	4.54	ug/L	91	(70-130)		
LCS2	Carbon Tetrachloride		5	4.20	ug/L	84	(70-130)	20	7.8
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.430	ug/L	86	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Chlorobenzene		5	4.60	ug/L	92	(70-130)		
LCS2	Chlorobenzene		5	4.38	ug/L	88	(70-130)	20	4.9
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Chlorodibromomethane		5	4.58	ug/L	92	(70-130)		
LCS2	Chlorodibromomethane		5	4.60	ug/L	92	(70-130)	20	0.44
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Chloroethane		5	6.20	ug/L	124	(70-130)		
LCS2	Chloroethane		5	5.76	ug/L	115	(70-130)	20	7.4
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	5.32	ug/L	106	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.02	ug/L	100	(70-130)	20	5.8
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	5.56	ug/L	111	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	5.25	ug/L	105	(70-130)	20	5.7
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.510	ug/L	102	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.98	ug/L	100	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.84	ug/L	97	(70-130)	20	2.9
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.40	ug/L	88	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.10	ug/L	82	(70-130)	20	7.1
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.430	ug/L	86	(50-150)		
LCS1	Dibromomethane		5	4.82	ug/L	96	(70-130)		
LCS2	Dibromomethane		5	4.83	ug/L	97	(70-130)	20	0.21
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	Dichlorodifluoromethane		5	5.93	ug/L	119	(70-130)		
LCS2	Dichlorodifluoromethane		5	5.44	ug/L	109	(70-130)	20	8.6
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.410	ug/L	82	(50-150)		
LCS1	Dichloromethane		5	5.53	ug/L	111	(70-130)		
LCS2	Dichloromethane		5	5.21	ug/L	104	(70-130)	20	6.0

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 877883
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Di-isopropyl ether		5	5.87	ug/L	117	(70-130)		
LCS2	Di-isopropyl ether		5	5.57	ug/L	111	(70-130)	20	5.2
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.550	ug/L	110	(50-150)		
LCS1	Ethyl benzene		5	4.77	ug/L	95	(70-130)		
LCS2	Ethyl benzene		5	4.55	ug/L	91	(70-130)	20	4.7
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Hexachlorobutadiene		5	4.67	ug/L	93	(70-130)		
LCS2	Hexachlorobutadiene		5	4.64	ug/L	93	(70-130)	20	0.64
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.580	ug/L	116	(50-150)		
LCS1	Isopropylbenzene		5	4.59	ug/L	92	(70-130)		
LCS2	Isopropylbenzene		5	4.43	ug/L	89	(70-130)	20	3.5
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.370	ug/L	74	(50-150)		
LCS1	m,p-Xylenes		10	9.63	ug/L	96	(70-130)		
LCS2	m,p-Xylenes		10	8.77	ug/L	88	(70-130)	20	9.3
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.770	ug/L	77	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.360	ug/L	72	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	5.30	ug/L	106	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.05	ug/L	101	(70-130)	20	4.8
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.450	ug/L	90	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.58	ug/L	112	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.32	ug/L	106	(70-130)	20	4.8
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.530	ug/L	106	(50-150)		
LCS1	Naphthalene		5	4.67	ug/L	93	(70-130)		
LCS2	Naphthalene		5	4.73	ug/L	95	(70-130)	20	1.3
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.680	ug/L	136	(50-150)		
LCS1	n-Butylbenzene		5	4.50	ug/L	90	(70-130)		
LCS2	n-Butylbenzene		5	4.48	ug/L	90	(70-130)	20	0.45
MBLK	n-Butylbenzene			<0.5	ug/L				

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	n-Butylbenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	n-Propylbenzene		5	4.56	ug/L	91	(70-130)		
LCS2	n-Propylbenzene		5	4.31	ug/L	86	(70-130)	20	5.6
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.400	ug/L	80	(50-150)		
LCS1	o-Chlorotoluene		5	4.60	ug/L	92	(70-130)		
LCS2	o-Chlorotoluene		5	4.42	ug/L	88	(70-130)	20	4.0
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.430	ug/L	86	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.86	ug/L	97	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.74	ug/L	95	(70-130)	20	2.5
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.460	ug/L	92	(50-150)		
LCS1	o-Xylene		5	4.58	ug/L	92	(70-130)		
LCS2	o-Xylene		5	4.37	ug/L	87	(70-130)	20	4.7
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.350	ug/L	70	(50-150)		
LCS1	p-Chlorotoluene		5	4.32	ug/L	86	(70-130)		
LCS2	p-Chlorotoluene		5	4.11	ug/L	82	(70-130)	20	5.0
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.350	ug/L	70	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.12	ug/L	102	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	4.81	ug/L	96	(70-130)	20	6.2
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.590	ug/L	118	(50-150)		
LCS1	p-Isopropyltoluene		5	4.92	ug/L	98	(70-130)		
LCS2	p-Isopropyltoluene		5	4.75	ug/L	95	(70-130)	20	3.5
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.580	ug/L	116	(50-150)		
LCS1	sec-Butylbenzene		5	5.26	ug/L	105	(70-130)		
LCS2	sec-Butylbenzene		5	4.96	ug/L	99	(70-130)	20	5.9
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.570	ug/L	114	(50-150)		
LCS1	Styrene		5	4.71	ug/L	94	(70-130)		
LCS2	Styrene		5	4.41	ug/L	88	(70-130)	20	6.6
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.380	ug/L	76	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.76	ug/L	95	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	tert-amyl Methyl Ether		5	4.49	ug/L	90	(70-130)	20	5.8
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.450	ug/L	90	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.40	ug/L	108	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	5.19	ug/L	104	(70-130)	20	4.0
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.490	ug/L	98	(50-150)		
LCS1	tert-Butylbenzene		5	4.86	ug/L	97	(70-130)		
LCS2	tert-Butylbenzene		5	4.60	ug/L	92	(70-130)	20	5.5
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.370	ug/L	74	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.33	ug/L	87	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	3.89	ug/L	78	(70-130)	20	11
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.430	ug/L	86	(50-150)		
LCS1	Toluene		5	4.78	ug/L	96	(70-130)		
LCS2	Toluene		5	4.41	ug/L	88	(70-130)	20	8.1
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Toluene-d8 (S)		5	99.4	%	99	(70-130)		
LCS2	Toluene-d8 (S)		5	96.4	%	96	(70-130)		
MBLK	Toluene-d8 (S)			92.4	%	92	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	94.8	%	95	(70-130)		
MRL_W	Toluene-d8 (S)		5	92.2	%	92	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	5.82	ug/L	116	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.47	ug/L	109	(70-130)	20	6.2
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.450	ug/L	90	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.12	ug/L	82	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	3.59	ug/L	72	(70-130)	20	14
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.370	ug/L	74	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.67	ug/L	93	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.34	ug/L	87	(70-130)	20	7.3
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.490	ug/L	98	(50-150)		
LCS1	Trichlorofluoromethane		5	5.70	ug/L	114	(70-130)		
LCS2	Trichlorofluoromethane		5	5.35	ug/L	107	(70-130)	20	6.3

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.26	ug/L	105	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.83	ug/L	97	(70-130)	20	8.5
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.530	ug/L	106	(50-150)		
LCS1	Vinyl chloride (VC)		5	5.93	ug/L	119	(70-130)		
LCS2	Vinyl chloride (VC)		5	5.73	ug/L	115	(70-130)	20	3.4
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.530	ug/L	106	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.290	ug/L	116	(50-150)		

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1259291

Analysis Date: 07/02/2020

LCS1	1,1,1,2-Tetrachloroethane		5	4.64	ug/L	93	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.31	ug/L	86	(70-130)	20	7.4
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.41	ug/L	88	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.32	ug/L	86	(70-130)	20	2.1
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	4.32	ug/L	86	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.53	ug/L	91	(70-130)	20	4.8
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.57	ug/L	91	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.35	ug/L	87	(70-130)	20	4.9
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,1-Dichloroethane		5	4.82	ug/L	96	(70-130)		
LCS2	1,1-Dichloroethane		5	4.53	ug/L	91	(70-130)	20	6.2
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.54	ug/L	91	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.41	ug/L	88	(70-130)	20	2.9
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.530	ug/L	106	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,1-Dichloropropene		5	4.12	ug/L	82	(70-130)		
LCS2	1,1-Dichloropropene		5	3.96	ug/L	79	(70-130)	20	4.0
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.56	ug/L	91	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.36	ug/L	87	(70-130)	20	4.5
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.640	ug/L	128	(50-150)		
LCS1	1,2,3-Trichloropropane		5	4.30	ug/L	86	(70-130)		
LCS2	1,2,3-Trichloropropane		5	4.46	ug/L	89	(70-130)	20	3.6
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.16	ug/L	83	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.19	ug/L	84	(70-130)	20	0.72
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.58	ug/L	92	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.45	ug/L	89	(70-130)	20	2.9
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.330	ug/L	66	(50-150)		
LCS1	1,2-Dichloroethane		5	4.69	ug/L	94	(70-130)		
LCS2	1,2-Dichloroethane		5	4.59	ug/L	92	(70-130)	20	2.2
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			113	%	113	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	109	%	109	(70-130)		
MRLW	1,2-Dichloroethane-d4 (S)		5	113	%	113	(70-130)		
LCS1	1,2-Dichloropropane		5	4.99	ug/L	100	(70-130)		
LCS2	1,2-Dichloropropane		5	4.52	ug/L	90	(70-130)	20	9.9
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.480	ug/L	96	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.57	ug/L	91	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.61	ug/L	92	(70-130)	20	0.87
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.340	ug/L	68	(50-150)		
LCS1	1,3-Dichloropropane		5	4.58	ug/L	92	(70-130)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	1,3-Dichloropropane		5	4.38	ug/L	88	(70-130)	20	4.5
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.470	ug/L	94	(50-150)		
LCS1	2,2-Dichloropropane		5	4.92	ug/L	98	(70-130)		
LCS2	2,2-Dichloropropane		5	4.74	ug/L	95	(70-130)	20	3.7
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.500	ug/L	100	(50-150)		
LCS1	2-Butanone (MEK)		50	44.5	ug/L	89	(70-130)		
LCS2	2-Butanone (MEK)		50	44.4	ug/L	89	(70-130)	20	0.23
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	4.22	ug/L	84	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	101	%	101	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	102	%	102	(70-130)		
MBLK	4-Bromofluorobenzene (S)			102	%	102	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	98.8	%	99	(70-130)		
MRL_LW	4-Bromofluorobenzene (S)		5	101	%	101	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	47.5	ug/L	95	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	46.1	ug/L	92	(70-130)	20	3.0
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.13	ug/L	83	(50-150)		
LCS1	Benzene		5	4.71	ug/L	94	(70-130)		
LCS2	Benzene		5	4.51	ug/L	90	(70-130)	20	4.3
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Bromobenzene		5	4.33	ug/L	87	(70-130)		
LCS2	Bromobenzene		5	4.26	ug/L	85	(70-130)	20	1.6
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Bromochloromethane		5	4.55	ug/L	91	(70-130)		
LCS2	Bromochloromethane		5	4.30	ug/L	86	(70-130)	20	5.7
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.570	ug/L	114	(50-150)		
LCS1	Bromodichloromethane		5	4.73	ug/L	95	(70-130)		
LCS2	Bromodichloromethane		5	4.54	ug/L	91	(70-130)	20	4.1
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	Bromoethane		5	4.75	ug/L	95	(70-130)		
LCS2	Bromoethane		5	4.84	ug/L	97	(70-130)	20	1.9

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 877883
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Bromoform		5	5.39	ug/L	108	(70-130)		
LCS2	Bromoform		5	5.27	ug/L	105	(70-130)	20	2.3
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.550	ug/L	110	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.23	ug/L	105	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.12	ug/L	102	(70-130)	20	2.1
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.530	ug/L	106	(50-150)		
LCS1	Carbon disulfide		5	4.78	ug/L	96	(70-130)		
LCS2	Carbon disulfide		5	4.60	ug/L	92	(70-130)	20	3.8
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.510	ug/L	102	(50-150)		
LCS1	Carbon Tetrachloride		5	4.09	ug/L	82	(70-130)		
LCS2	Carbon Tetrachloride		5	4.10	ug/L	82	(70-130)	20	0.24
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.400	ug/L	80	(50-150)		
LCS1	Chlorobenzene		5	4.66	ug/L	93	(70-130)		
LCS2	Chlorobenzene		5	4.36	ug/L	87	(70-130)	20	6.7
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	Chlorodibromomethane		5	4.74	ug/L	95	(70-130)		
LCS2	Chlorodibromomethane		5	4.51	ug/L	90	(70-130)	20	5.0
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.390	ug/L	78	(50-150)		
LCS1	Chloroethane		5	5.36	ug/L	107	(70-130)		
LCS2	Chloroethane		5	5.18	ug/L	104	(70-130)	20	3.4
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.70	ug/L	94	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.55	ug/L	91	(70-130)	20	3.2
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.500	ug/L	100	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	5.01	ug/L	100	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	5.03	ug/L	101	(70-130)	20	0.40
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.700	ug/L	140	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	cis-1,2-Dichloroethylene		5	4.55	ug/L	91	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.44	ug/L	89	(70-130)	20	2.5
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.44	ug/L	89	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.32	ug/L	86	(70-130)	20	2.7
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Dibromomethane		5	4.46	ug/L	89	(70-130)		
LCS2	Dibromomethane		5	4.16	ug/L	83	(70-130)	20	7.0
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	Dichlorodifluoromethane		5	5.64	ug/L	113	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.85	ug/L	97	(70-130)	20	15
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.340	ug/L	68	(50-150)		
LCS1	Dichloromethane		5	4.59	ug/L	92	(70-130)		
LCS2	Dichloromethane		5	4.42	ug/L	88	(70-130)	20	3.8
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.700	ug/L	140	(50-150)		
LCS1	Di-isopropyl ether		5	4.82	ug/L	96	(70-130)		
LCS2	Di-isopropyl ether		5	4.69	ug/L	94	(70-130)	20	2.7
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.550	ug/L	110	(50-150)		
LCS1	Ethyl benzene		5	4.73	ug/L	95	(70-130)		
LCS2	Ethyl benzene		5	4.53	ug/L	91	(70-130)	20	4.3
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.350	ug/L	70	(50-150)		
LCS1	Hexachlorobutadiene		5	4.37	ug/L	87	(70-130)		
LCS2	Hexachlorobutadiene		5	4.12	ug/L	82	(70-130)	20	5.9
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.510	ug/L	102	(50-150)		
LCS1	Isopropylbenzene		5	4.52	ug/L	90	(70-130)		
LCS2	Isopropylbenzene		5	4.49	ug/L	90	(70-130)	20	0.67
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.370	ug/L	74	(50-150)		
LCS1	m,p-Xylenes		10	8.96	ug/L	90	(70-130)		
LCS2	m,p-Xylenes		10	8.71	ug/L	87	(70-130)	20	2.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	1.02	ug/L	102	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.740	ug/L	148	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.68	ug/L	94	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.56	ug/L	91	(70-130)	20	2.6
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.460	ug/L	92	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.88	ug/L	98	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.67	ug/L	93	(70-130)	20	4.4
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.570	ug/L	114	(50-150)		
LCS1	Naphthalene		5	4.72	ug/L	94	(70-130)		
LCS2	Naphthalene		5	4.45	ug/L	89	(70-130)	20	5.9
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.580	ug/L	116	(50-150)		
LCS1	n-Butylbenzene		5	4.88	ug/L	98	(70-130)		
LCS2	n-Butylbenzene		5	4.57	ug/L	91	(70-130)	20	6.6
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	n-Propylbenzene		5	4.28	ug/L	86	(70-130)		
LCS2	n-Propylbenzene		5	4.22	ug/L	84	(70-130)	20	1.4
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.340	ug/L	68	(50-150)		
LCS1	o-Chlorotoluene		5	4.70	ug/L	94	(70-130)		
LCS2	o-Chlorotoluene		5	4.49	ug/L	90	(70-130)	20	4.6
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.410	ug/L	82	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.65	ug/L	93	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.55	ug/L	91	(70-130)	20	2.2
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.490	ug/L	98	(50-150)		
LCS1	o-Xylene		5	4.30	ug/L	86	(70-130)		
LCS2	o-Xylene		5	4.32	ug/L	86	(70-130)	20	0.46
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.320	ug/L	64	(50-150)		
LCS1	p-Chlorotoluene		5	4.38	ug/L	88	(70-130)		
LCS2	p-Chlorotoluene		5	4.40	ug/L	88	(70-130)	20	0.46
MBLK	p-Chlorotoluene			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	p-Chlorotoluene		0.5	0.340	ug/L	68	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.70	ug/L	94	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	4.63	ug/L	93	(70-130)	20	1.5
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.410	ug/L	82	(50-150)		
LCS1	p-Isopropyltoluene		5	4.32	ug/L	86	(70-130)		
LCS2	p-Isopropyltoluene		5	4.32	ug/L	86	(70-130)	20	0.0
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.540	ug/L	108	(50-150)		
LCS1	sec-Butylbenzene		5	4.69	ug/L	94	(70-130)		
LCS2	sec-Butylbenzene		5	4.65	ug/L	93	(70-130)	20	0.86
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.330	ug/L	66	(50-150)		
LCS1	Styrene		5	4.61	ug/L	92	(70-130)		
LCS2	Styrene		5	4.47	ug/L	89	(70-130)	20	3.1
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.540	ug/L	108	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.99	ug/L	100	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.86	ug/L	97	(70-130)	20	2.6
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.480	ug/L	96	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.27	ug/L	105	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	5.30	ug/L	106	(70-130)	20	0.57
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.570	ug/L	114	(50-150)		
LCS1	tert-Butylbenzene		5	4.37	ug/L	87	(70-130)		
LCS2	tert-Butylbenzene		5	4.37	ug/L	87	(70-130)	20	0.0
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.38	ug/L	88	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.13	ug/L	83	(70-130)	20	5.9
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.440	ug/L	88	(50-150)		
LCS1	Toluene		5	4.53	ug/L	91	(70-130)		
LCS2	Toluene		5	4.35	ug/L	87	(70-130)	20	4.0
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.440	ug/L	88	(50-150)		
LCS1	Toluene-d8 (S)		5	102	%	102	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 877883
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Toluene-d8 (S)		5	99.4	%	99	(70-130)		
MBLK	Toluene-d8 (S)			89.0	%	89	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	97.2	%	97	(70-130)		
MRLLW	Toluene-d8 (S)		5	92.8	%	93	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.94	ug/L	99	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.70	ug/L	94	(70-130)	20	5.0
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.560	ug/L	112	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.71	ug/L	94	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.31	ug/L	86	(70-130)	20	8.9
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.49	ug/L	90	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.36	ug/L	87	(70-130)	20	2.9
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.460	ug/L	92	(50-150)		
LCS1	Trichlorofluoromethane		5	4.77	ug/L	95	(70-130)		
LCS2	Trichlorofluoromethane		5	4.55	ug/L	91	(70-130)	20	4.7
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.400	ug/L	80	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.56	ug/L	91	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.41	ug/L	88	(70-130)	20	3.3
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.420	ug/L	84	(50-150)		
LCS1	Vinyl chloride (VC)		5	5.56	ug/L	111	(70-130)		
LCS2	Vinyl chloride (VC)		5	5.39	ug/L	108	(70-130)	20	3.1
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.470	ug/L	94	(50-150)		
MRLLW	Vinyl chloride (VC)		0.25	0.210	ug/L	84	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 07/15/2020

Quant Report - Page 1 of 1

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
Comment: _____
Approved by: _____

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 07/15/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells				MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 07/15/2020

Quant Report - Page 1 of 1

, Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-31747-1
Client Project/Site: 877883

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
7/7/2020 3:09:24 PM

Lori Thompson, Project Manager I
(714)895-5494
lorithompson@eurofinsus.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 877883

Job ID: 570-31747-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 877883

Job ID: 570-31747-1

Job ID: 570-31747-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-31747-1

Comments

No additional comments.

Receipt

The sample was received on 6/24/2020 12:48 PM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.4° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-77767. LCS/LCSD were performed to meet QC requirements.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

- 1
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- 13
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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 877883

Job ID: 570-31747-1

Client Sample ID: 202006230613

Lab Sample ID: 570-31747-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	3.91		0.977	0.781	mg/L	1		1664A	Total/NA

- 1
- 2
- 3
- 4
- 5
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- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 877883

Job ID: 570-31747-1

General Chemistry

Client Sample ID: 202006230613

Date Collected: 06/23/20 11:29

Date Received: 06/24/20 12:48

Lab Sample ID: 570-31747-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	3.91		0.977	0.781	mg/L		06/25/20 13:16	06/29/20 13:11	1

- 1
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- 12
- 13
- 14

QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 877883

Job ID: 570-31747-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-77767/1-A
Matrix: Water
Analysis Batch: 78369

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		06/25/20 13:16	06/29/20 13:11	1

Lab Sample ID: LCS 570-77767/2-A
Matrix: Water
Analysis Batch: 78369

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77767

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	40.10		mg/L		100	78 - 114

Lab Sample ID: LCSD 570-77767/3-A
Matrix: Water
Analysis Batch: 78369

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77767

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	40.00		mg/L		100	78 - 114	0	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 877883

Job ID: 570-31747-1

General Chemistry

Prep Batch: 77767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-31747-1	202006230613	Total/NA	Water	1664A	

Analysis Batch: 78369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-31747-1	202006230613	Total/NA	Water	1664A	77767

- 1
- 2
- 3
- 4
- 5
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- 13
- 14

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 877883

Job ID: 570-31747-1

Client Sample ID: 202006230613

Lab Sample ID: 570-31747-1

Date Collected: 06/23/20 11:29

Matrix: Water

Date Received: 06/24/20 12:48

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1024 mL	1000 mL	77767	06/25/20 13:16	SAL	ECL 1
Total/NA	Analysis	1664A		1			78369	06/29/20 13:11	SAL	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 877883

Job ID: 570-31747-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 877883

Job ID: 570-31747-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 877883

Job ID: 570-31747-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-31747-1	202006230613	Water	06/23/20 11:29	06/24/20 12:48	

- 1
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Eaton Analytical

Ship To:
Eurofins CalScience
7440 Lincoln Way
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 877883
Report Due: 07/08/2020

Submittal Form

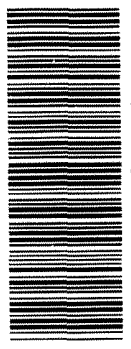
31747

***REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**
Report & Invoice must have the Folder# 877883 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.
Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: us20_subcontract@eurofins.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the
Specified State Certification # and
Exp Date for requested tests + matrix.
Samples from: CALIFORNIA



570-31747 Chain of Custody

Sample ID: 202006230613 Client Sample ID for reference onl MB-INF-20200623 Sample Date & Time Matrix 06/23/20 1129 DW PWS Systemcode PWSID JLS

Sample type: Sample Event: Sample Point ID: Facility ID: Static ID:

Method: EPA 1664 Prep Method: Analysis Requested: Oil and Grease by 1664(subbed)

Relinquished by: U Joy Sample Control Date: 6/24/20 Time: 12:48
Received by: [Signature] Date: 6/24/20 Time: 12:48
Relinquished by: _____ Date: _____ Time: _____
Received by: _____ Date: _____ Time: _____

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS
An Acknowledgement of Receipt is requested to attn: Jackie Contreras

7.8/3.4
3/6

13
www.EurofinsUS.com/Eaton

Page 2 of 3
750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016 Tel (626) 386-1100

Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-31747-1

Login Number: 31747

List Source: Eurofins Calscience

List Number: 1

Creator: Stratford, Jordan

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 878992
Project: 0250000
Group: WRD Pilot [Set #1]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 878992
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **June 30, 2020 at 1622**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202006300488	GAC-1M-20200630	06/30/2020 1203
	Static ID: SET A 537.1	
	@537.1	
202006300489	GAC-2M-20200630	06/30/2020 1206
	@537.1	
202006300490	GAC-3M-20200630	06/30/2020 1209
	@537.1	
202006300491	GAC-4M-20200630	06/30/2020 1212
	@537.1	
202006300492	IX-1M-20200630	06/30/2020 1215
	@537.1	
202006300493	IX-2M-20200630	06/30/2020 1218
	@537.1	
202006300494	IX-3M-20200630	06/30/2020 1221
	@537.1	
202006300495	IX-4M-20200630	06/30/2020 1224
	@537.1	
202006300497	LH-INF-20200630	06/30/2020 1227
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Calcium Total ICAP
	Chloride	Iron Total ICAP
	Magnesium Total ICAP	Oil and Grease by 1664(subbed)
	Perchlorate	Sodium Total ICAP
	Sulfate	Total Hardness as CaCO3 by ICP
	Total Organic Carbon	Uranium by ICPMS as pCi/L
	Uranium ICAP/MS	
	Hexavalent chromium(Dissolved)	
	Manganese Total ICAP/MS	
	Potassium Total ICAP	
	Total Dissolved Solid (TDS)	
	Total Suspended Solids (TSS)	
202006300498	LH-INF-DUP-20200630	06/30/2020 1230
	@537.1	
202006300499	GAC-5M-20200630	06/30/2020 1343

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 878992
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **June 30, 2020 at 1622**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202006300500	GAC-6M-20200630	06/30/2020 1346
	@537.1	
202006300501	GAC-7M-20200630	06/30/2020 1349
	@537.1	
202006300502	GAC-8M-20200630	06/30/2020 1352
	@537.1	
202006300503	IX-5M-20200630	06/30/2020 1355
	@537.1	
202006300504	IX-6M-20200630	06/30/2020 1358
	@537.1	
202006300505	IX-7M-20200630	06/30/2020 1401
	@537.1	
202006300506	IX-8M-20200630	06/30/2020 1404
	@537.1	
202006300510	MB-INF-20200630	06/30/2020 1407
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon
202006300511	FB - 20200630	06/30/2020 1410
	@537.1 FB	

Test Description

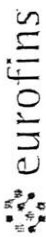
@537.1 -- EPA Method 537.1

@537.1 FB -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

@VOASDWA -- Volatile Organics by GCMS

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302																	
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang																	
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) <u>RDT</u>																	
LABORATORY: Eurofins Eaton Analytical		REQUESTED ANALYSES Please check box or fill in blank as needed.																			
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																					
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results																					
LAB USE ONLY	SAMPLE ID	TIME DATE	SAMPLING DATE TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrite (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)									
	IX-5M-20200630	1355	6-30	Water	2		2		X												
	IX-6M-20200630	1358	↓	Water	2		2		X												
	IX-7M-20200630	1401	↓	Water	2		2		X												
	IX-8M-20200630	1404	↓	Water	2		2		X												
	MB-INF-20200630	1407	↓	Water	5		2 3		X	X	X										
	MB-INF-DUP			Water																	
	FB-20200630	1410	6-30	Water	1		1														
Relinquished by: (Signature) <u>[Signature]</u> <u>6-30-2020 1422</u>						Received by: (Signature) <u>[Signature]</u>		Date: <u>6-30-20</u>		Time: <u>1422</u>											
Relinquished by: (Signature)						Received by: (Signature)		Date:		Time:											
Relinquished by: (Signature)						Received by: (Signature)		Date:		Time:											



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 8786992

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6499A (Observation = 19.0 °C) (Corr. Factor = -0.3 °C) (Final = 13.7 °C)

TYPE OF ICE: Real Synthetic No Ice Condition of Ice: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC Internal COFC for additional bottles)
Exempt from headspace concerns: Methods 515.4, HAA(6251, 552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	>6mm	None/<6	mm	Samp ID	Bottle #	>6mm	None/<6	mm	Samp ID	Bottle #	>6mm	None/<6	mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: <u>yan</u>	PRINT NAME: <u>paul hicks</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>6-30-28</u>	TIME: <u>1622</u>
-------------------------	-------------------------------	---	----------------------	-------------------

750 Royal Oaks Drive, Suite 100
 Monrovia, California 91016-3629
 (626) 386-1100 FAX (866) 988-3757

Created Date & Time: 5/27/2020 6:04:42PM

Kit #: 264841



Created By: Anisha Zachariah - [ZR4B]

Deliver By: 06/08/2020

STG: Bottle Orders

Ice Type: G

Client ID: WRD



Project Code: 0250000 Bottle Orders

Group Name: WRD Pilot [Set#1]

PO#/JOB#:

Description: WRD Pilot Set #1

Shipping Method: Pickup by client

Ship Sample Kits to
 GSI Environmental Inc.

Attn: Robert Torres
 Phone: 951-616-8406

Send Report to
 Water Replenishment District
 4040 Paramount Blvd.
 Lakewood, CA 90712

Attn: Joseph Liles
 Phone: 562-275-4226

Billing Address
 Water Replenishment District

Attn: Eurofins Calscience

Water Replenishment District
 4040 Paramount Blvd
 Lakewood, CA 90712

Attn: Brian Partington
 Phone: 562-275-4249
 Fax: 562-921-6101

# of	Sample - Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
2	Total Organic Carbon	1 - 125ml amber glass [0.5 ml H2SO4 (50%)]	2	UN1830
2	Hexavalent Chromium (Dissolved)	1 - 125ml poly [1.25 ml NH4SO4/NH4OH buffer]	2	
2	@ANIONS48, Chloride, Sulfate	1 - 125ml poly [no preservative]	2	
2	Perchlorate	1 - 125ml poly [no preservative]	2	
2	Oil and Grease by 1664(subbed)	2 - 1L amber glass [H2SO4 4 ml 50% H2SO4 & 4C]	4	
2	Alkalinity in CaCO3 units	1 - 250ml poly [no preservative]	2	
4	@537.1	2 - 275 ml polypro w polypro cap [1.4 g Trisma]	8	
2	@VOASDWA	3 - 40ml amber glass vial [4drops 6N HCL (36%)]	6	UN1789
2	Arsenic Total ICAP/MS, Calcium Total ICAP, Iron Total ICAP, Magnesium Total ICAP, Manganese Total ICAP/MS, Potassium Total ICAP, Sodium Total ICAP, Uranium by ICPMS as pCi/L, Uranium ICAP/MS	1 - 500ml acid poly [2ml HNO3 (18%)]	2	UN2031
2	Total Dissolved Solid (TDS), Total Suspended Solids (TSS)	1 - 500ml poly [no preservative]	2	

Sum Tests: 22

Sum Bottles: 32

Comments

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 5/27/2020 6:04:42PM

Note: Sampler Please return this paper with your samples

Kit #: 264841



Client ID: WRD



Project Code: 0250000 Bottle Orders

Created By: Anisha Zachariah - [ZR4B]

Deliver By: 06/08/2020

STG: Bottle Orders

Ice Type: G

Group Name: WRD Pilot [Set#1]

PO#/JOB#:

Description: WRD Pilot Set #1

Shipping Method: Pickup by client

Ship Sample Kits to
GSI Environmental Inc.

Attn: Robert Torres
Phone: 951-616-8406

Send Report to
Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712

Attn: Joseph Liles
Phone: 562-275-4226

Billing Address
Water Replenishment District

Attn: Eurofins Calscience

Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712

Attn: Brian Partington
Phone: 562-275-4249
Fax: 562-921-6101

of

Sample Tests

Bottle Qty - Type: [preservative information]

Total

UN DOT #

SHIPPING:

- CLIENT P/U TUESDAY, JUNE 9TH MORNING
- PACKAGE IN 2 LARGE COOLERS

GSI SAMPLER:

- PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES.
- NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP.

ASM:

- Please also send invoices to Miae Jeon (mjeon@gsi-net.com)
- Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pegalvin@gsi-net.com, and rdtorres@gsi-net.com.

Code

Status

Date Shipped

Via

Tracking #

of Coolers

Prepared By

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 878992
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Flags Legend:

R7 - LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202006300494	<u>IX-3M-20200630</u>				
07/02/2020 22:40	Perfluorohexanoic acid (PFHxA)		0.0022		ug/L	0.0020
	202006300497	<u>LH-INF-20200630</u>				
07/06/2020 14:49	Alkalinity in CaCO3 units		200		mg/L	2.0
07/08/2020 15:47	Arsenic Total ICAP/MS		3.1	10	ug/L	1.0
07/01/2020 13:33	Calcium Total ICAP		110		mg/L	1.0
07/01/2020 03:10	Chloride		100	250	mg/L	5.0
07/07/2020 0:00	Chloroform (Trichloromethane)		0.64		ug/L	0.50
07/02/2020 16:17	Hexavalent chromium(Dissolved)		0.70		ug/L	0.020
07/01/2020 13:33	Magnesium Total ICAP		21		mg/L	0.10
07/01/2020 03:10	Nitrate as Nitrogen by IC		2.7	10	mg/L	1.0
07/01/2020 03:10	Nitrate as NO3 (calc)		12	45	mg/L	4.4
07/10/2020 13:34	Oil and Grease by 1664(subbed)		3.52		mg/L	0.95
07/06/2020 17:44	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
07/06/2020 17:44	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
07/06/2020 17:44	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
07/06/2020 17:44	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
07/06/2020 17:44	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
07/06/2020 17:44	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
07/01/2020 13:33	Potassium Total ICAP		4.7		mg/L	1.0
07/01/2020 13:33	Sodium Total ICAP		70		mg/L	1.0
07/01/2020 03:10	Sulfate		170	250	mg/L	5.0
07/02/2020 22:16	Total Dissolved Solids (TDS)		650	500	mg/L	10
07/01/2020 15:03	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
07/01/2020 03:10	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
07/07/2020 16:48	Total Organic Carbon		0.69		mg/L	0.30
07/07/2020 0:00	Total THM		0.64	80	ug/L	0.50
07/08/2020 16:38	Uranium by ICPMS as pCi/L		3.8		pCi/L	0.70
07/08/2020 15:47	Uranium ICAP/MS		5.6	30	ug/L	1.0
	202006300498	<u>LH-INF-DUP-20200630</u>				
07/06/2020 18:51	Perfluorobutanesulfonic acid (PFBS)		0.0058		ug/L	0.0020
07/06/2020 18:51	Perfluorohexanesulfonic acid (PFHxS)		0.0061		ug/L	0.0020
07/06/2020 18:51	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
07/06/2020 18:51	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
07/06/2020 18:51	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
07/06/2020 18:51	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (666) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202006300499 <u>GAC-5M-20200630</u>						
07/06/2020 19:01	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
07/06/2020 19:01	Perfluorooctanoic acid (PFOA)		0.0022		ug/L	0.0020
202006300501 <u>GAC-7M-20200630</u>						
07/06/2020 19:20	Perfluorobutanesulfonic acid (PFBS)		0.0025		ug/L	0.0020
202006300503 <u>IX-5M-20200630</u>						
07/06/2020 19:50	Perfluorohexanoic acid (PFHxA)		0.0029		ug/L	0.0020
07/06/2020 19:50	Perfluorooctanoic acid (PFOA)		0.0045		ug/L	0.0020
202006300504 <u>IX-6M-20200630</u>						
07/06/2020 20:01	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
07/06/2020 20:01	Perfluorooctanoic acid (PFOA)		0.0037		ug/L	0.0020
202006300505 <u>IX-7M-20200630</u>						
07/06/2020 20:10	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
07/06/2020 20:10	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
07/06/2020 20:10	Perfluorooctanoic acid (PFOA)		0.0065		ug/L	0.0020
202006300506 <u>IX-8M-20200630</u>						
07/06/2020 18:03	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
07/06/2020 18:03	Perfluorooctanoic acid (PFOA)		0.0034		ug/L	0.0020
202006300510 <u>MB-INF-20200630</u>						
07/02/2020 12:40	Alkalinity in CaCO3 units		170		mg/L	2.0
07/01/2020 03:49	Chloride		54	250	mg/L	2.5
07/01/2020 03:49	Nitrate as Nitrogen by IC		2.3	10	mg/L	0.50
07/01/2020 03:49	Nitrate as NO3 (calc)		10	45	mg/L	2.2
07/06/2020 20:20	Perfluorobutanesulfonic acid (PFBS)		0.0087		ug/L	0.0020
07/06/2020 20:20	Perfluoroheptanoic acid (PFHpA)		0.0031		ug/L	0.0020
07/06/2020 20:20	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
07/06/2020 20:20	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
07/06/2020 20:20	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
07/06/2020 20:20	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
07/06/2020 20:20	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
07/01/2020 03:49	Sulfate		79	250	mg/L	2.5
07/01/2020 03:49	Total Nitrate, Nitrite-N, CALC		2.3		mg/L	0.10
07/07/2020 18:32	Total Organic Carbon		0.76		mg/L	0.30

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1M-20200630 (202006300488)						Sampled on 06/30/2020 1203			
Static ID: SET A 537.1									
EPA 537.1 - EPA Method 537.1									
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	13C2-PFDA	104	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	13C2-PFHxA	106	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	101	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	105	%		1
07/01/20	07/02/20 21:31	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	102	%		1

GAC-2M-20200630 (202006300489)						Sampled on 06/30/2020 1206			
EPA 537.1 - EPA Method 537.1									
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	13C2-PFDA	103	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	13C2-PFHxA	105	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	111	%		1
07/01/20	07/02/20 21:51	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-3M-20200630 (202006300490)

Sampled on 06/30/2020 1209

EPA 537.1 - EPA Method 537.1

07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	13C2-PFDA	108	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	13C2-PFHxA	106	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	85	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	82	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	93	%		1
07/01/20	07/02/20 22:02	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	99	%		1

GAC-4M-20200630 (202006300491)

Sampled on 06/30/2020 1212

EPA 537.1 - EPA Method 537.1

07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	13C2-PFDA	108	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	13C2-PFHxA	106	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	86	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	100	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	87	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	94	%		1
07/01/20	07/02/20 22:12	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	103	%		1

IX-1M-20200630 (202006300492)

Sampled on 06/30/2020 1215

EPA 537.1 - EPA Method 537.1

07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	13C2-PFDA	108	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	13C2-PFHxA	101	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	97	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	109	%		1
07/01/20	07/02/20 22:21	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-2M-20200630 (202006300493)

Sampled on 06/30/2020 1218

EPA 537.1 - EPA Method 537.1

07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	13C2-PFDA	105	%		1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	13C2-PFHxA	105	%		1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	87	%		1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	99	%		1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	84	%		1
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	92	%		1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 22:31	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	103	%		1
IX-3M-20200630 (202006300494)					Sampled on 06/30/2020 1221				
EPA 537.1 - EPA Method 537.1									
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	13C2-PFDA	109	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	13C2-PFHxA	106	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	100	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	109	%		1
07/01/20	07/02/20 22:40	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	105	%		1

IX-4M-20200630 (202006300495)

Sampled on 06/30/2020 1224

EPA 537.1 - EPA Method 537.1

07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	13C2-PFDA	109	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	13C2-PFHxA	106	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	13C2-PFOA- IS#1	85	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	13C3-HFPO-DA	101	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	13C4-PFOS- IS#2	82	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	d3-NMeFOSAA	91	%		1
07/01/20	07/02/20 22:50	1258786	1259138	(EPA 537.1)	d5-NEtFOSAA	107	%		1

LH-INF-20200630 (202006300497)

Sampled on 06/30/2020 1227

EPA 200.8 - ICPMS Metals

07/01/20	07/08/20 15:47	1258782	1259874	(EPA 200.8)	Arsenic Total ICAP/MS	3.1	ug/L	1.0	1
07/01/20	07/08/20 15:47	1258782	1259874	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
07/01/20	07/08/20 15:47	1258782	1259874	(EPA 200.8)	Uranium ICAP/MS	5.6	ug/L	1.0	1

EPA 200.7 - ICP Metals

07/01/20	07/01/20 13:33	1258782	1258807	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
07/01/20	07/01/20 13:33	1258782	1258807	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
07/01/20	07/01/20 13:33	1258782	1258807	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
07/01/20	07/01/20 13:33	1258782	1258807	(EPA 200.7)	Potassium Total ICAP	4.7	mg/L	1.0	1
07/01/20	07/01/20 13:33	1258782	1258807	(EPA 200.7)	Sodium Total ICAP	70	mg/L	1.0	1

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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
SM 5310C - Total Organic Carbon									
	07/07/20 16:48		1260013	(SM 5310C)	Total Organic Carbon	0.69	mg/L	0.30	1
EPA 200.8 - Uranium by ICPMS as pCi/L									
	07/08/20 16:38			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.8 (c)	pCi/L	0.70	1
SM 2340B - Total Hardness as CaCO3 by ICP									
	07/01/20 15:03			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
	07/02/20 16:17		1259301	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.70	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	07/01/20 03:10		1258690	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	1.0	10
	07/01/20 03:10		1258690	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	4.4	10
	07/01/20 03:10		1258690	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.12	10
	07/01/20 03:10		1258690	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	07/01/20 03:10		1258691	(EPA 300.0)	Chloride	100	mg/L	5.0	10
	07/01/20 03:10		1258691	(EPA 300.0)	Sulfate	170	mg/L	5.0	10
EPA 314.0 - Perchlorate									
	07/02/20 20:53	(1)	1259131	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

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 Group: WRD Pilot [Set #1]

Water Replenishment District
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 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	13C2-PFDA	96	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	13C2-PFHxA	96	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	92	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	109	%		1
07/02/20	07/06/20 17:44	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	99	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	07/10/20 13:34			(EPA 1664)	Oil and Grease by 1664(subbed)	3.52	mg/L	0.95	1
EPA 524.2 - Volatile Organics by GCMS									
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1

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 Project: 0250000
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Water Replenishment District
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 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

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07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Carbon Tetrachloride	ND (R7)	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Chloroform (Trichloromethane)	0.64	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1

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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Total THM	0.64	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	1,2-Dichloroethane-d4	116	%		1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	4-Bromofluorobenzene	92	%		1
07/06/20	07/07/20 0:00	1259659	1259663	(EPA 524.2)	Toluene-d8	95	%		1
SM 2320B - Alkalinity in CaCO3 units									
	07/06/20 14:49		1259518	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
07/02/20	07/02/20 22:16	1259222	1259225	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	650	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	07/06/20 23:22		1259640	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<u>LH-INF-DUP-20200630 (202006300498)</u>					Sampled on 06/30/2020 1230				
EPA 537.1 - EPA Method 537.1									
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0058	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0061	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	13C2-PFDA	102	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	13C2-PFHxA	101	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	110	%		1
07/02/20	07/06/20 18:51	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-5M-20200630 (202006300499)

Sampled on 06/30/2020 1343

EPA 537.1 - EPA Method 537.1

07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0022	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	13C2-PFDA	100	%		1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	13C2-PFHxA	99	%		1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1

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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	116	%		1
07/02/20	07/06/20 19:01	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	90	%		1

GAC-6M-20200630 (202006300500)

Sampled on 06/30/2020 1346

EPA 537.1 - EPA Method 537.1

07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	13C2-PFDA	97	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	13C2-PFHxA	101	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	107	%		1
07/02/20	07/06/20 19:10	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	92	%		1

GAC-7M-20200630 (202006300501)

Sampled on 06/30/2020 1349

EPA 537.1 - EPA Method 537.1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0025	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	13C2-PFDA	98	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	13C2-PFHxA	98	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	110	%		1
07/02/20	07/06/20 19:20	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	91	%		1

GAC-8M-20200630 (202006300502)

Sampled on 06/30/2020 1352

EPA 537.1 - EPA Method 537.1

07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	13C2-PFDA	101	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	13C2-PFHxA	100	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	100	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	108	%		1
07/02/20	07/06/20 19:29	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	94	%		1

IX-5M-20200630 (202006300503)

Sampled on 06/30/2020 1355

EPA 537.1 - EPA Method 537.1

07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0029	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0045	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	13C2-PFDA	103	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	13C2-PFHxA	101	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	97	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/02/20	07/06/20 19:50	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	98	%		1

IX-6M-20200630 (202006300504)

Sampled on 06/30/2020 1358

EPA 537.1 - EPA Method 537.1

07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0037	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	13C2-PFDA	106	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	13C2-PFHxA	99	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	112	%		1
07/02/20	07/06/20 20:01	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	96	%		1

IX-7M-20200630 (202006300505)

Sampled on 06/30/2020 1401

EPA 537.1 - EPA Method 537.1

07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0065	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	13C2-PFDA	100	%		1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	13C2-PFHxA	101	%		1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	105	%		1
07/02/20	07/06/20 20:10	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	97	%		1

IX-8M-20200630 (202006300506)

Sampled on 06/30/2020 1404

EPA 537.1 - EPA Method 537.1

07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0034	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	13C2-PFDA	97	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	13C2-PFHxA	96	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	93	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	d3-NMeFOSAA	113	%		1
07/02/20	07/06/20 18:03	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	92	%		1

MB-INF-20200630 (202006300510)

Sampled on 06/30/2020 1407

SM 5310C - Total Organic Carbon

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	07/07/20 18:32		1260013	(SM 5310C)	Total Organic Carbon	0.76	mg/L	0.30	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	07/01/20 03:49		1258690	(EPA 300.0)	Nitrate as Nitrogen by IC	2.3	mg/L	0.50	5
	07/01/20 03:49		1258690	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
	07/01/20 03:49		1258690	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	07/01/20 03:49		1258690	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.3	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	07/01/20 03:49		1258691	(EPA 300.0)	Chloride	54	mg/L	2.5	5
	07/01/20 03:49		1258691	(EPA 300.0)	Sulfate	79	mg/L	2.5	5
EPA 537.1 - EPA Method 537.1									
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0087	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0031	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	13C2-PFDA	94	%		1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	13C2-PFHxA	94	%		1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	13C3-HFPO-DA	87	%		1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	d3-NMEFOSAA	108	%		1

Rounding on totals after summation.
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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 06/30/2020 1622

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/02/20	07/06/20 20:20	1259068	1259764	(EPA 537.1)	d5-NEtFOSAA	97	%		1
SM 2320B - Alkalinity in CaCO3 units									
	07/02/20 12:40		1259053	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
FB - 20200630 (202006300511)					Sampled on 06/30/2020 1410				
EPA 537.1 - EPA Method 537.1									
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	11-chloroheptacosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	13C2-PFDA	100	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	13C2-PFHxA	103	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	98	%		1
07/08/20	07/10/20 14:49	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	92	%		1

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Report: 878992
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1258690

202006300497 LH-INF-20200630
 202006300510 MB-INF-20200630

Analysis Date: 07/01/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1258691

202006300497 LH-INF-20200630
 202006300510 MB-INF-20200630

Analysis Date: 07/01/2020

Analyzed by: HL7J
 Analyzed by: HL7J

ICP Metals

Prep Batch: 1258782 Analytical Batch: 1258807

202006300497 LH-INF-20200630

Analysis Date: 07/01/2020

Analyzed by: NINA

Alkalinity in CaCO3 units

Analytical Batch: 1259053

202006300510 MB-INF-20200630

Analysis Date: 07/02/2020

Analyzed by: ZB2Z

Perchlorate

Analytical Batch: 1259131

202006300497 LH-INF-20200630

Analysis Date: 07/02/2020

Analyzed by: H5VG

EPA Method 537.1

Prep Batch: 1258786 Analytical Batch: 1259138

202006300488 GAC-1M-20200630
 202006300489 GAC-2M-20200630
 202006300490 GAC-3M-20200630
 202006300491 GAC-4M-20200630
 202006300492 IX-1M-20200630
 202006300493 IX-2M-20200630
 202006300494 IX-3M-20200630
 202006300495 IX-4M-20200630

Analysis Date: 07/02/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

Total Dissolved Solids (TDS)

Prep Batch: 1259222 Analytical Batch: 1259225

202006300497 LH-INF-20200630

Analysis Date: 07/02/2020

Analyzed by: TJ52

Hexavalent chromium(Dissolved)

Analytical Batch: 1259301

202006300497 LH-INF-20200630

Analysis Date: 07/02/2020

Analyzed by: TLH

Alkalinity in CaCO3 units

Analytical Batch: 1259518

202006300497 LH-INF-20200630

Analysis Date: 07/06/2020

Analyzed by: ZB2Z

Total Suspended Solids (TSS)

Analytical Batch: 1259640

202006300497 LH-INF-20200630

Analysis Date: 07/06/2020

Analyzed by: TJ52

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Report: 878992
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

Volatile Organics by GCMS

Prep Batch: 1259659 Analytical Batch: 1259663

202006300497 LH-INF-20200630

Analysis Date: 07/07/2020

Analyzed by: TG9W

EPA Method 537.1

Prep Batch: 1259068 Analytical Batch: 1259764

202006300497 LH-INF-20200630
 202006300498 LH-INF-DUP-20200630
 202006300499 GAC-5M-20200630
 202006300500 GAC-6M-20200630
 202006300501 GAC-7M-20200630
 202006300502 GAC-8M-20200630
 202006300503 IX-5M-20200630
 202006300504 IX-6M-20200630
 202006300505 IX-7M-20200630
 202006300506 IX-8M-20200630
 202006300510 MB-INF-20200630

Analysis Date: 07/06/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
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 Analyzed by: KAM
 Analyzed by: KAM
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 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

ICPMS Metals

Prep Batch: 1258782 Analytical Batch: 1259874

202006300497 LH-INF-20200630

Analysis Date: 07/08/2020

Analyzed by: DHX7

Total Organic Carbon

Analytical Batch: 1260013

202006300497 LH-INF-20200630
 202006300510 MB-INF-20200630

Analysis Date: 07/07/2020

Analyzed by: ZS6I
 Analyzed by: ZS6I

EPA Method 537.1

Prep Batch: 1259960 Analytical Batch: 1261159

202006300511 FB - 20200630

Analysis Date: 07/10/2020

Analyzed by: KAM

Tel: (626) 386-1100
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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1258690					Analysis Date: 07/01/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.58	mg/L	103	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.58	mg/L	103	(90-110)	20	0.39
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0493	mg/L	99	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0116	mg/L	93	(50-150)		
MS_202006300497	Nitrate as Nitrogen by IC	2.7	13	15.8	mg/L	105	(80-120)		
MS_202006300863	Nitrate as Nitrogen by IC	10	6.5	17.2	mg/L	108	(80-120)		
MSD_202006300497	Nitrate as Nitrogen by IC	2.7	13	15.9	mg/L	106	(80-120)	20	0.63
MSD_202006300863	Nitrate as Nitrogen by IC	10	6.5	17.2	mg/L	108	(80-120)	20	0.20
LCS1	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0506	mg/L	101	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0125	mg/L	100	(50-150)		
MS_202006300497	Nitrite Nitrogen by IC	ND	5	5.10	mg/L	102	(80-120)		
MS_202006300863	Nitrite Nitrogen by IC	ND	2.5	2.58	mg/L	103	(80-120)		
MSD_202006300497	Nitrite Nitrogen by IC	ND	5	5.14	mg/L	103	(80-120)	20	0.74
MSD_202006300863	Nitrite Nitrogen by IC	ND	2.5	2.60	mg/L	104	(80-120)	20	0.54
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1258691					Analysis Date: 07/01/2020				
LCS1	Chloride		25	26.9	mg/L	108	(90-110)		
LCS2	Chloride		25	26.9	mg/L	108	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.456	mg/L	91	(50-150)		
MS_202006300497	Chloride	100	130	243	mg/L	113	(80-120)		
MSD_202006300497	Chloride	100	130	245	mg/L	115	(80-120)	20	0.87
LCS1	Sulfate		50	52.5	mg/L	105	(90-110)		
LCS2	Sulfate		50	52.6	mg/L	105	(90-110)	20	0.19
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.01	mg/L	101	(50-150)		
MRL_W	Sulfate		0.25	0.248	mg/L	99	(50-150)		
MS_202006300497	Sulfate	170	250	444	mg/L	109	(80-120)		
MSD_202006300497	Sulfate	170	250	447	mg/L	110	(80-120)	20	0.56

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
ICP Metals by EPA 200.7									
Analytical Batch: 1258807					Analysis Date: 07/01/2020				
LCS1	Calcium Total ICAP		50	51.0	mg/L	102	(85-115)		
LCS2	Calcium Total ICAP		50	50.8	mg/L	102	(85-115)	20	0.39
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.999	mg/L	100	(50-150)		
MS_202006290087	Calcium Total ICAP	1.1	50	51.8	mg/L	101	(70-130)		
MS2_202006300300	Calcium Total ICAP	15	50	64.6	mg/L	100	(70-130)		
MSD_202006290087	Calcium Total ICAP	1.1	50	51.2	mg/L	100	(70-130)	20	1.2
MSD2_202006300300	Calcium Total ICAP	15	50	64.3	mg/L	99	(70-130)	20	0.45
LCS1	Iron Total ICAP		5	5.12	mg/L	102	(85-115)		
LCS2	Iron Total ICAP		5	5.10	mg/L	102	(85-115)	20	0.39
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0211	mg/L	106	(50-150)		
MS_202006290087	Iron Total ICAP	ND	5	5.08	mg/L	102	(70-130)		
MS2_202006300300	Iron Total ICAP	ND	5	5.04	mg/L	101	(70-130)		
MSD_202006290087	Iron Total ICAP	ND	5	5.05	mg/L	101	(70-130)	20	0.63
MSD2_202006300300	Iron Total ICAP	ND	5	5.05	mg/L	101	(70-130)	20	0.18
LCS1	Magnesium Total ICAP		20	20.4	mg/L	102	(85-115)		
LCS2	Magnesium Total ICAP		20	20.3	mg/L	102	(85-115)	20	0.49
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0957	mg/L	96	(50-150)		
MS_202006290087	Magnesium Total ICAP	0.24	20	20.6	mg/L	102	(70-130)		
MS2_202006300300	Magnesium Total ICAP	2.2	20	22.3	mg/L	101	(70-130)		
MSD_202006290087	Magnesium Total ICAP	0.24	20	20.4	mg/L	101	(70-130)	20	0.75
MSD2_202006300300	Magnesium Total ICAP	2.2	20	22.4	mg/L	101	(70-130)	20	0.52
LCS1	Potassium Total ICAP		20	20.6	mg/L	103	(85-115)		
LCS2	Potassium Total ICAP		20	20.6	mg/L	103	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.698	mg/L	70	(50-150)		
MS_202006290087	Potassium Total ICAP	ND	20	21.0	mg/L	105	(70-130)		
MS2_202006300300	Potassium Total ICAP	ND	20	21.9	mg/L	106	(70-130)		
MSD_202006290087	Potassium Total ICAP	ND	20	20.8	mg/L	104	(70-130)	20	0.27
MSD2_202006300300	Potassium Total ICAP	ND	20	22.0	mg/L	107	(70-130)	20	0.83
LCS1	Sodium Total ICAP		50	50.5	mg/L	101	(85-115)		
LCS2	Sodium Total ICAP		50	50.3	mg/L	101	(85-115)	20	0.40
MBLK	Sodium Total ICAP			<0.5	mg/L				

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Sodium Total ICAP		1	0.804	mg/L	80	(50-150)		
MS_202006290087	Sodium Total ICAP	1.8	50	51.8	mg/L	100	(70-130)		
MS2_202006300300	Sodium Total ICAP	15	50	63.5	mg/L	96	(70-130)		
MSD_202006290087	Sodium Total ICAP	1.8	50	51.6	mg/L	100	(70-130)	20	0.46
MSD2_202006300300	Sodium Total ICAP	15	50	64.3	mg/L	98	(70-130)	20	1.2

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1259053

Analysis Date: 07/02/2020

LCS1	Alkalinity in CaCO3 units		100	105	mg/L	105	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.8	mg/L	100	(90-110)	20	5.1
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.91	mg/L	96	(50-150)		
MS_202007010354	Alkalinity in CaCO3 units	150	100	285	mg/L	111	(80-120)		
MS_202007010679	Alkalinity in CaCO3 units	250	100	321	mg/L	<u>74</u>	(80-120)		
MSD_202007010354	Alkalinity in CaCO3 units	150	100	176	mg/L	<u>1.9</u>	(80-120)	20	<u>47</u>
MSD_202007010679	Alkalinity in CaCO3 units	250	100	314	mg/L	<u>67</u>	(80-120)	20	2.1

Perchlorate by EPA 314.0

Analytical Batch: 1259131

Analysis Date: 07/02/2020

LCS1	Perchlorate		25	24.5	ug/L	98	(85-115)		
LCS2	Perchlorate		25	24.7	ug/L	99	(85-115)	15	0.81
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	4.02	ug/L	101	(75-125)		
MS_202006300281	Perchlorate	ND	25	21.9	ug/L	88	(80-120)		
MSD_202006300281	Perchlorate	ND	25	21.9	ug/L	88	(80-120)	15	0.16

EPA Method 537.1 by EPA 537.1

Prep Batch: 1258786 Analytical Batch: 1259138

Analysis Date: 07/02/2020

DUP_202006300494	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0427	ug/L	91	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0503	ug/L	107	(70-130)	30	16
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00201	ug/L	107	(50-150)		
MS1_202006300488	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0221	ug/L	94	(70-130)		
DUP_202006300494	13C2-PFDA (S)			109	%	109	(70-130)		
LCS3	13C2-PFDA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFDA (S)		100	103	%	103	(70-130)		
MBLK	13C2-PFDA (S)			103	%	103	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	101	%	101	(70-130)		

Spike recovery is already corrected for native results.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202006300488	13C2-PFDA (S)		100	101	%	101	(70-130)		
DUP_202006300494	13C2-PFHxA (S)			108	%	108	(70-130)		
LCS3	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFHxA (S)			105	%	105	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	103	%	103	(70-130)		
MS1_202006300488	13C2-PFHxA (S)		100	102	%	102	(70-130)		
DUP_202006300494	13C2-PFOA- IS#1 (I)			91.6	%	92	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	99.0	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MS1_202006300488	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
DUP_202006300494	13C3-HFPO-DA (S)			102	%	102	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	99.8	%	100	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	97.8	%	98	(70-130)		
MBLK	13C3-HFPO-DA (S)			100	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	97.9	%	98	(70-130)		
MS1_202006300488	13C3-HFPO-DA (S)		100	99.5	%	100	(70-130)		
DUP_202006300494	13C4-PFOS- IS#2 (I)			87.2	%	87	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	93.1	%	93	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			94.0	%	94	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	93.5	%	93	(50-150)		
MS1_202006300488	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
DUP_202006300494	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0458	ug/L	94	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0468	ug/L	97	(70-130)	30	2.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00192	ug/L	102	(50-150)		
MS1_202006300488	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0245	ug/L	104	(70-130)		
DUP_202006300494	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0461	ug/L	99	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0470	ug/L	101	(70-130)	30	1.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00191	ug/L	103	(50-150)		
MS1_202006300488	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0240	ug/L	103	(70-130)		
DUP_202006300494	d3-NMeFOSAA (I)			95.9	%	96	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	99.8	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			100	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MS1_202006300488	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
DUP_202006300494	d5-NEtFOSAA (S)			104	%	104	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	95.6	%	96	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	98.8	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			102	%	102	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	99.1	%	99	(70-130)		
MS1_202006300488	d5-NEtFOSAA (S)		100	98.2	%	98	(70-130)		
DUP_202006300494	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0471	ug/L	94	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0466	ug/L	93	(70-130)	30	1.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00184	ug/L	92	(50-150)		
MS1_202006300488	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0240	ug/L	96	(70-130)		
DUP_202006300494	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0468	ug/L	94	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0485	ug/L	97	(70-130)	30	3.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00202	ug/L	101	(50-150)		
MS1_202006300488	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0252	ug/L	101	(70-130)		
DUP_202006300494	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0471	ug/L	94	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0484	ug/L	97	(70-130)	30	2.7
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00198	ug/L	99	(50-150)		
MS1_202006300488	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0259	ug/L	104	(70-130)		
DUP_202006300494	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0440	ug/L	99	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0413	ug/L	93	(70-130)	30	6.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00179	ug/L	101	(50-150)		
MS1_202006300488	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0233	ug/L	105	(70-130)		
DUP_202006300494	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0483	ug/L	97	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0496	ug/L	99	(70-130)	30	2.7

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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00197	ug/L	98	(50-150)		
MS1_202006300488	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0245	ug/L	98	(70-130)		
DUP_202006300494	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0528	ug/L	106	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0512	ug/L	102	(70-130)	30	3.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00209	ug/L	104	(50-150)		
MS1_202006300488	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0273	ug/L	109	(70-130)		
DUP_202006300494	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0480	ug/L	96	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0527	ug/L	105	(70-130)	30	9.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00216	ug/L	108	(50-150)		
MS1_202006300488	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202006300494	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0462	ug/L	101	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0477	ug/L	105	(70-130)	30	3.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00192	ug/L	105	(50-150)		
MS1_202006300488	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0248	ug/L	109	(70-130)		
DUP_202006300494	Perfluorohexanoic acid (PFHxA)	0.0022		0.00227	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0491	ug/L	98	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0492	ug/L	99	(70-130)	30	0.20
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00210	ug/L	105	(50-150)		
MS1_202006300488	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0264	ug/L	105	(70-130)		
DUP_202006300494	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0507	ug/L	101	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00221	ug/L	110	(50-150)		
MS1_202006300488	Perfluorononanoic acid (PFNA)	ND	0.025	0.0256	ug/L	102	(70-130)		
DUP_202006300494	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0470	ug/L	102	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0459	ug/L	99	(70-130)	30	2.4
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00198	ug/L	107	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202006300488	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0250	ug/L	108	(70-130)		
DUP_202006300494	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0503	ug/L	101	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0508	ug/L	102	(70-130)	30	0.99
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202006300488	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0262	ug/L	104	(70-130)		
DUP_202006300494	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0584	ug/L	117	(70-130)	30	9.3
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00250	ug/L	125	(50-150)		
MS1_202006300488	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0267	ug/L	105	(70-130)		
DUP_202006300494	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0528	ug/L	106	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0519	ug/L	104	(70-130)	30	1.7
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202006300488	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0261	ug/L	104	(70-130)		
DUP_202006300494	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0489	ug/L	98	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0495	ug/L	99	(70-130)	30	1.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00207	ug/L	104	(50-150)		
MS1_202006300488	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0251	ug/L	100	(70-130)		

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1259225

Analysis Date: 07/02/2020

DUP_202005260429	Total Dissolved Solid (TDS)	480		476	mg/L		(0-10)	10	0.84
DUP_202006300497	Total Dissolved Solid (TDS)	650		640	mg/L		(0-10)	10	2.2
LCS1	Total Dissolved Solid (TDS)		175	176	mg/L	101	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	686	mg/L	98	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	13.0	mg/L	130	(50-150)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1259301

Analysis Date: 07/02/2020

LCS1	Hexavalent chromium(Dissolved)		2	2.01	ug/L	101	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0189	ug/L	95	(50-150)		
MS_202006250224	Hexavalent chromium(Dissolved)	ND	2	2.14	ug/L	106	(90-110)		
MS_202007030017	Hexavalent chromium(Dissolved)	0.24	2	2.38	ug/L	107	(90-110)		
MSD_202006250224	Hexavalent chromium(Dissolved)	ND	2	2.14	ug/L	106	(90-110)	20	0.17
MSD_202007030017	Hexavalent chromium(Dissolved)	0.24	2	2.38	ug/L	107	(90-110)	20	0.013

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1259518

Analysis Date: 07/06/2020

LCS1	Alkalinity in CaCO3 units		100	101	mg/L	101	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)	20	1.4
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.08	mg/L	104	(50-150)		
MS_202007020043	Alkalinity in CaCO3 units	43	100	141	mg/L	98	(80-120)		
MS_202007020308	Alkalinity in CaCO3 units	130	100	233	mg/L	101	(80-120)		
MSD_202007020043	Alkalinity in CaCO3 units	43	100	140	mg/L	98	(80-120)	20	0.29
MSD_202007020308	Alkalinity in CaCO3 units	130	100	232	mg/L	100	(80-120)	20	0.21

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1259640

Analysis Date: 07/06/2020

DUP_202005270057	Total Suspended Solids (TSS)	300		302	mg/L		(0-10)	10	0.66
DUP_202005270094	Total Suspended Solids (TSS)	50		46.0	mg/L		(0-10)	10	8.3
LCS1	Total Suspended Solids (TSS)		175	162	mg/L	93	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	170	mg/L	97	(71-107)	20	4.8
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	9.00	mg/L	90	(50-150)		

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1259663

Analysis Date: 07/06/2020

LCS1	1,1,1,2-Tetrachloroethane		5	5.76	ug/L	115	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.68	ug/L	114	(70-130)	20	1.4
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.81	ug/L	96	(70-130)		
LCS2	1,1,1-Trichloroethane		5	5.85	ug/L	117	(70-130)	20	20
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.45	ug/L	109	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.65	ug/L	113	(70-130)	20	3.6

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.590	ug/L	118	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.98	ug/L	100	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.14	ug/L	103	(70-130)	20	3.2
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1-Dichloroethane		5	5.11	ug/L	102	(70-130)		
LCS2	1,1-Dichloroethane		5	4.94	ug/L	99	(70-130)	20	3.4
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.620	ug/L	124	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.17	ug/L	103	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.97	ug/L	99	(70-130)	20	3.9
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.680	ug/L	136	(50-150)		
LCS1	1,1-Dichloropropene		5	4.86	ug/L	97	(70-130)		
LCS2	1,1-Dichloropropene		5	5.52	ug/L	110	(70-130)	20	13
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.600	ug/L	120	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	5.22	ug/L	104	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	5.41	ug/L	108	(70-130)	20	3.6
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.15	ug/L	103	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.47	ug/L	109	(70-130)	20	6.0
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.600	ug/L	120	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	5.13	ug/L	103	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.27	ug/L	105	(70-130)	20	2.7
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	5.06	ug/L	101	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.31	ug/L	106	(70-130)	20	4.8
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2-Dichloroethane		5	5.31	ug/L	106	(70-130)		
LCS2	1,2-Dichloroethane		5	5.33	ug/L	107	(70-130)	20	0.38
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.560	ug/L	112	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 878992
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	112	%	112	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			91.4	%	91	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS1	1,2-Dichloropropane		5	5.07	ug/L	101	(70-130)		
LCS2	1,2-Dichloropropane		5	5.15	ug/L	103	(70-130)	20	1.6
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.91	ug/L	98	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	5.11	ug/L	102	(70-130)	20	4.0
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,3-Dichloropropane		5	4.98	ug/L	100	(70-130)		
LCS2	1,3-Dichloropropane		5	5.08	ug/L	102	(70-130)	20	2.0
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	2,2-Dichloropropane		5	5.08	ug/L	102	(70-130)		
LCS2	2,2-Dichloropropane		5	5.00	ug/L	100	(70-130)	20	1.6
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.520	ug/L	104	(50-150)		
LCS1	2-Butanone (MEK)		50	51.4	ug/L	103	(70-130)		
LCS2	2-Butanone (MEK)		50	49.9	ug/L	100	(70-130)	20	3.0
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.48	ug/L	110	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	102	%	102	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	100	%	100	(70-130)		
MBLK	4-Bromofluorobenzene (S)			96.4	%	96	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	104	%	104	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	101	%	101	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	52.4	ug/L	105	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	58.4	ug/L	117	(70-130)	20	11
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.72	ug/L	94	(50-150)		
LCS1	Benzene		5	5.14	ug/L	103	(70-130)		
LCS2	Benzene		5	5.71	ug/L	114	(70-130)	20	11
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.570	ug/L	114	(50-150)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 878992
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Bromobenzene		5	5.34	ug/L	107	(70-130)		
LCS2	Bromobenzene		5	5.38	ug/L	108	(70-130)	20	0.75
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.580	ug/L	116	(50-150)		
LCS1	Bromochloromethane		5	4.85	ug/L	97	(70-130)		
LCS2	Bromochloromethane		5	5.62	ug/L	112	(70-130)	20	15
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.610	ug/L	122	(50-150)		
LCS1	Bromodichloromethane		5	5.19	ug/L	104	(70-130)		
LCS2	Bromodichloromethane		5	4.97	ug/L	99	(70-130)	20	4.3
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	Bromoethane		5	4.91	ug/L	98	(70-130)		
LCS2	Bromoethane		5	4.86	ug/L	97	(70-130)	20	1.0
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.640	ug/L	128	(50-150)		
LCS1	Bromoform		5	5.44	ug/L	109	(70-130)		
LCS2	Bromoform		5	4.83	ug/L	97	(70-130)	20	12
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.550	ug/L	110	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.21	ug/L	104	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.19	ug/L	104	(70-130)	20	0.39
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.650	ug/L	130	(50-150)		
LCS1	Carbon disulfide		5	5.29	ug/L	106	(70-130)		
LCS2	Carbon disulfide		5	5.04	ug/L	101	(70-130)	20	4.8
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.580	ug/L	116	(50-150)		
LCS1	Carbon Tetrachloride		5	5.09	ug/L	102	(70-130)		
LCS2	Carbon Tetrachloride		5	6.28	ug/L	126	(70-130)	20	<u>21</u>
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.560	ug/L	112	(50-150)		
LCS1	Chlorobenzene		5	5.10	ug/L	102	(70-130)		
LCS2	Chlorobenzene		5	5.11	ug/L	102	(70-130)	20	0.20
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Chlorodibromomethane		5	5.67	ug/L	113	(70-130)		
LCS2	Chlorodibromomethane		5	5.29	ug/L	106	(70-130)	20	6.9

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	Chloroethane		5	5.40	ug/L	108	(70-130)		
LCS2	Chloroethane		5	5.05	ug/L	101	(70-130)	20	6.7
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.730	ug/L	146	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.81	ug/L	96	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.22	ug/L	104	(70-130)	20	8.2
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.600	ug/L	120	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	5.02	ug/L	100	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.53	ug/L	91	(70-130)	20	10
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.720	ug/L	144	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	5.02	ug/L	100	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.98	ug/L	100	(70-130)	20	0.80
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.640	ug/L	128	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	5.30	ug/L	106	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	5.20	ug/L	104	(70-130)	20	1.9
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.430	ug/L	86	(50-150)		
LCS1	Dibromomethane		5	4.98	ug/L	100	(70-130)		
LCS2	Dibromomethane		5	5.03	ug/L	101	(70-130)	20	1
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	Dichlorodifluoromethane		5	5.39	ug/L	108	(70-130)		
LCS2	Dichlorodifluoromethane		5	5.37	ug/L	107	(70-130)	20	0.37
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.730	ug/L	146	(50-150)		
LCS1	Dichloromethane		5	5.28	ug/L	106	(70-130)		
LCS2	Dichloromethane		5	5.13	ug/L	103	(70-130)	20	2.9
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.630	ug/L	126	(50-150)		
LCS1	Di-isopropyl ether		5	5.46	ug/L	109	(70-130)		
LCS2	Di-isopropyl ether		5	4.95	ug/L	99	(70-130)	20	9.8
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.630	ug/L	126	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Ethyl benzene		5	5.14	ug/L	103	(70-130)		
LCS2	Ethyl benzene		5	5.17	ug/L	103	(70-130)	20	0.58
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	Hexachlorobutadiene		5	5.21	ug/L	104	(70-130)		
LCS2	Hexachlorobutadiene		5	5.43	ug/L	109	(70-130)	20	4.1
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.550	ug/L	110	(50-150)		
LCS1	Isopropylbenzene		5	5.07	ug/L	101	(70-130)		
LCS2	Isopropylbenzene		5	5.25	ug/L	105	(70-130)	20	3.5
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.560	ug/L	112	(50-150)		
LCS1	m,p-Xylenes		10	10.2	ug/L	102	(70-130)		
LCS2	m,p-Xylenes		10	10.2	ug/L	102	(70-130)	20	0.0
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	1.01	ug/L	101	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.540	ug/L	108	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	5.39	ug/L	108	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.43	ug/L	109	(70-130)	20	0.74
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.590	ug/L	118	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.28	ug/L	106	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.08	ug/L	102	(70-130)	20	3.9
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.630	ug/L	126	(50-150)		
LCS1	Naphthalene		5	5.34	ug/L	107	(70-130)		
LCS2	Naphthalene		5	5.48	ug/L	110	(70-130)	20	2.6
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.460	ug/L	92	(50-150)		
LCS1	n-Butylbenzene		5	5.04	ug/L	101	(70-130)		
LCS2	n-Butylbenzene		5	5.17	ug/L	103	(70-130)	20	2.5
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	n-Propylbenzene		5	5.23	ug/L	105	(70-130)		
LCS2	n-Propylbenzene		5	5.37	ug/L	107	(70-130)	20	2.6
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.580	ug/L	116	(50-150)		
LCS1	o-Chlorotoluene		5	5.31	ug/L	106	(70-130)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	o-Chlorotoluene		5	5.46	ug/L	109	(70-130)	20	2.8
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.590	ug/L	118	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	5.21	ug/L	104	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.40	ug/L	108	(70-130)	20	3.6
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.550	ug/L	110	(50-150)		
LCS1	o-Xylene		5	5.16	ug/L	103	(70-130)		
LCS2	o-Xylene		5	5.16	ug/L	103	(70-130)	20	0.0
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.520	ug/L	104	(50-150)		
LCS1	p-Chlorotoluene		5	5.23	ug/L	105	(70-130)		
LCS2	p-Chlorotoluene		5	5.30	ug/L	106	(70-130)	20	1.3
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.550	ug/L	110	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.32	ug/L	106	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.42	ug/L	108	(70-130)	20	1.9
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.620	ug/L	124	(50-150)		
LCS1	p-Isopropyltoluene		5	5.17	ug/L	103	(70-130)		
LCS2	p-Isopropyltoluene		5	5.36	ug/L	107	(70-130)	20	3.6
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.530	ug/L	106	(50-150)		
LCS1	sec-Butylbenzene		5	5.49	ug/L	110	(70-130)		
LCS2	sec-Butylbenzene		5	5.68	ug/L	114	(70-130)	20	3.4
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.560	ug/L	112	(50-150)		
LCS1	Styrene		5	5.13	ug/L	103	(70-130)		
LCS2	Styrene		5	5.14	ug/L	103	(70-130)	20	0.20
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.450	ug/L	90	(50-150)		
LCS1	tert-amyl Methyl Ether		5	5.35	ug/L	107	(70-130)		
LCS2	tert-amyl Methyl Ether		5	5.73	ug/L	115	(70-130)	20	6.9
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.530	ug/L	106	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.54	ug/L	111	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	5.27	ug/L	105	(70-130)	20	5.0
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.590	ug/L	118	(50-150)		
LCS1	tert-Butylbenzene		5	5.05	ug/L	101	(70-130)		
LCS2	tert-Butylbenzene		5	5.23	ug/L	105	(70-130)	20	3.5
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.550	ug/L	110	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.94	ug/L	99	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.89	ug/L	98	(70-130)	20	1.0
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.610	ug/L	122	(50-150)		
LCS1	Toluene		5	5.00	ug/L	100	(70-130)		
LCS2	Toluene		5	4.97	ug/L	99	(70-130)	20	0.60
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.560	ug/L	112	(50-150)		
LCS1	Toluene-d8 (S)		5	97.6	%	98	(70-130)		
LCS2	Toluene-d8 (S)		5	96.8	%	97	(70-130)		
MBLK	Toluene-d8 (S)			86.0	%	86	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	96.4	%	96	(70-130)		
MRLW	Toluene-d8 (S)		5	94.0	%	94	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	5.51	ug/L	110	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.44	ug/L	109	(70-130)	20	1.3
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.610	ug/L	122	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	5.05	ug/L	101	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.91	ug/L	98	(70-130)	20	2.8
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.400	ug/L	80	(50-150)		
LCS1	Trichloroethylene (TCE)		5	5.03	ug/L	101	(70-130)		
LCS2	Trichloroethylene (TCE)		5	5.07	ug/L	101	(70-130)	20	0.79
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.570	ug/L	114	(50-150)		
LCS1	Trichlorofluoromethane		5	5.14	ug/L	103	(70-130)		
LCS2	Trichlorofluoromethane		5	5.05	ug/L	101	(70-130)	20	1.8
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.720	ug/L	144	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.09	ug/L	102	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.87	ug/L	97	(70-130)	20	4.4
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.700	ug/L	140	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Vinyl chloride (VC)		5	5.30	ug/L	106	(70-130)		
LCS2	Vinyl chloride (VC)		5	5.01	ug/L	100	(70-130)	20	5.6
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.720	ug/L	144	(50-150)		
MRLLLW	Vinyl chloride (VC)		0.25	0.360	ug/L	144	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1259068 Analytical Batch: 1259764

Analysis Date: 07/06/2020

DUP_202006300506	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0229	ug/L	97	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0232	ug/L	99	(70-130)	30	1.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00182	ug/L	97	(50-150)		
MS_202006300497	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00174	ug/L	93	(50-150)		
DUP_202006300506	13C2-PFDA (S)			94.0	%	94	(70-130)		
LCS1	13C2-PFDA (S)		100	97.4	%	97	(70-130)		
LCS2	13C2-PFDA (S)		100	94.4	%	94	(70-130)		
MBLK	13C2-PFDA (S)			99.2	%	99	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	99.8	%	100	(70-130)		
MS_202006300497	13C2-PFDA (S)		100	93.1	%	93	(70-130)		
DUP_202006300506	13C2-PFHxA (S)			94.9	%	95	(70-130)		
LCS1	13C2-PFHxA (S)		100	97.4	%	97	(70-130)		
LCS2	13C2-PFHxA (S)		100	96.8	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			97.0	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	99.0	%	99	(70-130)		
MS_202006300497	13C2-PFHxA (S)		100	92.2	%	92	(70-130)		
DUP_202006300506	13C2-PFOA- IS#1 (I)			113	%	113	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			110	%	110	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS_202006300497	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
DUP_202006300506	13C3-HFPO-DA (S)			89.5	%	90	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	95.6	%	96	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	93.4	%	93	(70-130)		
MBLK	13C3-HFPO-DA (S)			94.3	%	94	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	95.7	%	96	(70-130)		
MS_202006300497	13C3-HFPO-DA (S)		100	88.9	%	89	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006300506	13C4-PFOS- IS#2 (I)			108	%	109	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
MS_202006300497	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202006300506	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0235	ug/L	99	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0236	ug/L	100	(70-130)	30	0.43
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS_202006300497	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00179	ug/L	95	(50-150)		
DUP_202006300506	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0237	ug/L	102	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0234	ug/L	100	(70-130)	30	1.3
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00188	ug/L	101	(50-150)		
MS_202006300497	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00176	ug/L	95	(50-150)		
DUP_202006300506	d3-NMeFOSAA (I)			117	%	117	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	110	%	111	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MBLK	d3-NMeFOSAA (I)			112	%	112	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MS_202006300497	d3-NMeFOSAA (I)		100	112	%	112	(50-150)		
DUP_202006300506	d5-NEtFOSAA (S)			94.3	%	94	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	91.5	%	91	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	92.0	%	92	(70-130)		
MBLK	d5-NEtFOSAA (S)			97.1	%	97	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	93.7	%	94	(70-130)		
MS_202006300497	d5-NEtFOSAA (S)		100	91.9	%	92	(70-130)		
DUP_202006300506	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0236	ug/L	95	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0238	ug/L	95	(70-130)	30	0.42
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00195	ug/L	98	(50-150)		
MS_202006300497	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00181	ug/L	91	(50-150)		
DUP_202006300506	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0237	ug/L	95	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0240	ug/L	96	(70-130)	30	1.3
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00202	ug/L	101	(50-150)		
MS_202006300497	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00194	ug/L	97	(50-150)		
DUP_202006300506	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0238	ug/L	95	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0240	ug/L	96	(70-130)	30	0.84
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00204	ug/L	102	(50-150)		
MS_202006300497	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00190	ug/L	95	(50-150)		
DUP_202006300506	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0222	ug/L	100	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0222	ug/L	100	(70-130)	30	0.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00179	ug/L	101	(50-150)		
MS_202006300497	Perfluorobutanesulfonic acid (PFBS)	0.0060	0.0018	0.00760	ug/L	92	(50-150)		
DUP_202006300506	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0250	ug/L	100	(70-130)	30	0.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00211	ug/L	105	(50-150)		
MS_202006300497	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00277	ug/L	89	(50-150)		
DUP_202006300506	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0257	ug/L	103	(70-130)	30	2.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00217	ug/L	109	(50-150)		
MS_202006300497	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00187	ug/L	94	(50-150)		
DUP_202006300506	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0261	ug/L	104	(70-130)	30	2.7
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202006300497	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00379	ug/L	100	(50-150)		
DUP_202006300506	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0236	ug/L	103	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0231	ug/L	101	(70-130)	30	2.1
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00189	ug/L	103	(50-150)		
MS_202006300497	Perfluorohexanesulfonic acid (PFHxS)	0.0063	0.0018	0.00816	ug/L	102	(50-150)		
DUP_202006300506	Perfluorohexanoic acid (PFHxA)	0.0034		0.00291	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0258	ug/L	103	(70-130)	30	3.1
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202006300497	Perfluorohexanoic acid (PFHxA)	0.0033	0.002	0.00507	ug/L	90	(50-150)		
DUP_202006300506	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0247	ug/L	99	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0251	ug/L	100	(70-130)	30	1.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202006300497	Perfluorononanoic acid (PFNA)	0.0029	0.002	0.00464	ug/L	88	(50-150)		
DUP_202006300506	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0232	ug/L	100	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0230	ug/L	100	(70-130)	30	0.43
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00195	ug/L	105	(50-150)		
MS_202006300497	Perfluorooctanesulfonic acid (PFOS)	0.031	0.0019	0.0324	ug/L	83	(50-150)		
DUP_202006300506	Perfluorooctanoic acid (PFOA)	0.0034		0.00291	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0251	ug/L	100	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0256	ug/L	102	(70-130)	30	2.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202006300497	Perfluorooctanoic acid (PFOA)	0.012	0.002	0.0137	ug/L	78	(50-150)		
DUP_202006300506	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0271	ug/L	108	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0274	ug/L	110	(70-130)	30	1.5
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00256	ug/L	128	(50-150)		
MS_202006300497	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00284	ug/L	107	(50-150)		
DUP_202006300506	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0251	ug/L	100	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0243	ug/L	97	(70-130)	30	3.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00209	ug/L	105	(50-150)		
MS_202006300497	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00184	ug/L	92	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202006300506	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0237	ug/L	95	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0251	ug/L	100	(70-130)	30	5.7
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202006300497	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00188	ug/L	94	(50-150)		

ICPMS Metals by EPA 200.8

Analytical Batch: 1259874

Analysis Date: 07/08/2020

LCS1	Arsenic Total ICAP/MS		50	53.8	ug/L	108	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	52.9	ug/L	106	(85-115)	20	1.7
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.09	ug/L	109	(50-150)		
MS_202006180116	Arsenic Total ICAP/MS	ND	50	55.4	ug/L	111	(70-130)		
MS2_202007010413	Arsenic Total ICAP/MS	2.8	50	58.9	ug/L	112	(70-130)		
MSD_202006180116	Arsenic Total ICAP/MS	ND	50	56.6	ug/L	113	(70-130)	20	2.1
MSD2_202007010413	Arsenic Total ICAP/MS	2.8	50	59.2	ug/L	113	(70-130)	20	0.46
LCS1	Manganese Total ICAP/MS		100	105	ug/L	105	(85-115)		
LCS2	Manganese Total ICAP/MS		100	102	ug/L	103	(85-115)	20	1.9
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.13	ug/L	106	(50-150)		
MS_202006180116	Manganese Total ICAP/MS	ND	100	103	ug/L	103	(70-130)		
MS2_202007010413	Manganese Total ICAP/MS	ND	100	100	ug/L	100	(70-130)		
MSD_202006180116	Manganese Total ICAP/MS	ND	100	106	ug/L	106	(70-130)	20	3.0
MSD2_202007010413	Manganese Total ICAP/MS	ND	100	100	ug/L	99	(70-130)	20	0.045
LCS1	Uranium ICAP/MS		50	51.1	ug/L	102	(85-115)		
LCS2	Uranium ICAP/MS		50	50.2	ug/L	100	(85-115)	20	1.8
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.989	ug/L	99	(50-150)		
MS_202006180116	Uranium ICAP/MS	ND	50	50.7	ug/L	101	(70-130)		
MS2_202007010413	Uranium ICAP/MS	3	50	58.2	ug/L	110	(70-130)		
MSD_202006180116	Uranium ICAP/MS	ND	50	51.7	ug/L	103	(70-130)	20	1.9
MSD2_202007010413	Uranium ICAP/MS	3	50	58.4	ug/L	111	(70-130)	20	0.40

Total Organic Carbon by SM 5310C

Analytical Batch: 1260013

Analysis Date: 07/07/2020

LCS1	Total Organic Carbon		5	4.81	mg/L	96	(90-110)		
LCS2	Total Organic Carbon		5	4.75	mg/L	95	(90-110)	20	1.3
MBLK	Total Organic Carbon			<0.15	mg/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 878992
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 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Total Organic Carbon		0.2	0.226	mg/L	113	(50-150)		
MS_202006300497	Total Organic Carbon	0.69	4	4.47	mg/L	95	(80-120)		
MS2_202007010646	Total Organic Carbon	ND	2	2.04	mg/L	96	(80-120)		
MSD_202006300497	Total Organic Carbon	0.69	4	4.55	mg/L	96	(80-120)	20	1.8
MSD2_202007010646	Total Organic Carbon	ND	2	2.01	mg/L	95	(80-120)	20	1.7

EPA Method 537.1 by EPA 537.1

Prep Batch: 1259960 Analytical Batch: 1261159

Analysis Date: 07/10/2020

DUP_202007070505	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0465	ug/L	99	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0500	ug/L	106	(70-130)	30	7.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00210	ug/L	112	(50-150)		
MS1_202007070504	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0236	ug/L	100	(70-130)		
DUP_202007070505	13C2-PFDA (S)			93.2	%	93	(70-130)		
LCS3	13C2-PFDA (S)		100	90.6	%	91	(70-130)		
LCS4	13C2-PFDA (S)		100	93.7	%	94	(70-130)		
MBLK	13C2-PFDA (S)			96.0	%	96	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	93.9	%	94	(70-130)		
MS1_202007070504	13C2-PFDA (S)		100	94.1	%	94	(70-130)		
DUP_202007070505	13C2-PFHxA (S)			105	%	105	(70-130)		
LCS3	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	109	%	109	(70-130)		
MS1_202007070504	13C2-PFHxA (S)		100	106	%	106	(70-130)		
DUP_202007070505	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.0	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	98.8	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.7	%	99	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS1_202007070504	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
DUP_202007070505	13C3-HFPO-DA (S)			96.3	%	96	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	96.3	%	96	(70-130)		
MBLK	13C3-HFPO-DA (S)			98.1	%	98	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	98.2	%	98	(70-130)		
MS1_202007070504	13C3-HFPO-DA (S)		100	97.0	%	97	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007070505	13C4-PFOS- IS#2 (I)			92.6	%	93	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	93.4	%	93	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	94.5	%	94	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.0	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	94.3	%	94	(50-150)		
MS1_202007070504	13C4-PFOS- IS#2 (I)		100	98.3	%	98	(50-150)		
DUP_202007070505	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0492	ug/L	101	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0497	ug/L	102	(70-130)	30	1.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00232	ug/L	123	(50-150)		
MS1_202007070504	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0265	ug/L	112	(70-130)		
DUP_202007070505	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0450	ug/L	97	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0472	ug/L	101	(70-130)	30	4.8
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00205	ug/L	110	(50-150)		
MS1_202007070504	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0232	ug/L	100	(70-130)		
DUP_202007070505	d3-NMeFOSAA (I)			96.3	%	96	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	95.5	%	95	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	98.1	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.3	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MS1_202007070504	d3-NMeFOSAA (I)		100	97.8	%	98	(50-150)		
DUP_202007070505	d5-NEtFOSAA (S)			95.9	%	96	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	90.3	%	90	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	91.6	%	92	(70-130)		
MBLK	d5-NEtFOSAA (S)			90.6	%	91	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	90.1	%	90	(70-130)		
MS1_202007070504	d5-NEtFOSAA (S)		100	93.9	%	94	(70-130)		
DUP_202007070505	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0499	ug/L	100	(70-130)	30	2.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00227	ug/L	114	(50-150)		
MS1_202007070504	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0256	ug/L	102	(70-130)		
DUP_202007070505	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0491	ug/L	98	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 878992
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0488	ug/L	98	(70-130)	30	0.61
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00199	ug/L	99	(50-150)		
MS1_202007070504	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0254	ug/L	102	(70-130)		
DUP_202007070505	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0469	ug/L	94	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0484	ug/L	97	(70-130)	30	3.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS1_202007070504	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0252	ug/L	101	(70-130)		
DUP_202007070505	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0460	ug/L	104	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0463	ug/L	105	(70-130)	30	0.65
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00213	ug/L	120	(50-150)		
MS1_202007070504	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0234	ug/L	106	(70-130)		
DUP_202007070505	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0470	ug/L	94	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0497	ug/L	99	(70-130)	30	5.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00223	ug/L	111	(50-150)		
MS1_202007070504	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0255	ug/L	102	(70-130)		
DUP_202007070505	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0442	ug/L	88	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0490	ug/L	98	(70-130)	30	10
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00211	ug/L	106	(50-150)		
MS1_202007070504	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0237	ug/L	95	(70-130)		
DUP_202007070505	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0556	ug/L	111	(70-130)	30	0.54
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00261	ug/L	130	(50-150)		
MS1_202007070504	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0300	ug/L	120	(70-130)		
DUP_202007070505	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0476	ug/L	104	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0474	ug/L	104	(70-130)	30	0.42
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 878992
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00216	ug/L	118	(50-150)		
MS1_202007070504	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0247	ug/L	108	(70-130)		
DUP_202007070505	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0548	ug/L	110	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0553	ug/L	111	(70-130)	30	0.91
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00263	ug/L	131	(50-150)		
MS1_202007070504	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0287	ug/L	115	(70-130)		
DUP_202007070505	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0498	ug/L	100	(70-130)	30	1.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00235	ug/L	117	(50-150)		
MS1_202007070504	Perfluorononanoic acid (PFNA)	ND	0.025	0.0263	ug/L	105	(70-130)		
DUP_202007070505	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0457	ug/L	99	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0469	ug/L	101	(70-130)	30	2.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00215	ug/L	116	(50-150)		
MS1_202007070504	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0237	ug/L	102	(70-130)		
DUP_202007070505	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0515	ug/L	103	(70-130)	30	1.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00251	ug/L	126	(50-150)		
MS1_202007070504	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0276	ug/L	110	(70-130)		
DUP_202007070505	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0527	ug/L	105	(70-130)	30	5.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00290	ug/L	145	(50-150)		
MS1_202007070504	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0266	ug/L	106	(70-130)		
DUP_202007070505	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0468	ug/L	94	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0494	ug/L	99	(70-130)	30	5.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202007070504	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0243	ug/L	97	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 878992
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007070505	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0463	ug/L	93	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0513	ug/L	103	(70-130)	30	10
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202007070504	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0245	ug/L	98	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 07/21/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 07/21/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____

Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 07/21/2020

Quant Report - Page 1 of 1

, Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-32285-1
Client Project/Site: 878992

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
7/14/2020 9:22:42 AM

Lori Thompson, Project Manager I
(714)895-5494
lorithompson@eurofinsus.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 878992

Job ID: 570-32285-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 878992

Job ID: 570-32285-1

Job ID: 570-32285-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-32285-1

Comments

No additional comments.

Receipt

The sample was received on 7/1/2020 11:30 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 878992

Job ID: 570-32285-1

Client Sample ID: 202006300497

Lab Sample ID: 570-32285-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	3.52		0.951	0.760	mg/L	1		1664A	Total/NA

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 878992

Job ID: 570-32285-1

General Chemistry

Client Sample ID: 202006300497

Date Collected: 06/30/20 12:27

Date Received: 07/01/20 11:30

Lab Sample ID: 570-32285-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	3.52		0.951	0.760	mg/L		07/10/20 13:34	07/10/20 13:34	1

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QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 878992

Job ID: 570-32285-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-80577/1-A
Matrix: Water
Analysis Batch: 80874

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80577

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		07/10/20 13:34	07/10/20 13:34	1

Lab Sample ID: LCS 570-80577/2-A
Matrix: Water
Analysis Batch: 80874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80577

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	36.80		mg/L		92	78 - 114

Lab Sample ID: LCSD 570-80577/3-A
Matrix: Water
Analysis Batch: 80874

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80577

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.30		mg/L		93	78 - 114	1	18

Lab Sample ID: 570-32772-D-1-A MS
Matrix: Water
Analysis Batch: 80874

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 80577

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	1.32	F2 F1	37.9	35.89		mg/L		91	78 - 114

Lab Sample ID: 570-32772-D-1-B MSD
Matrix: Water
Analysis Batch: 80874

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 80577

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	1.32	F2 F1	37.9	35.42		mg/L		90	78 - 114	1	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 878992

Job ID: 570-32285-1

General Chemistry

Prep Batch: 80577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-32285-1	202006300497	Total/NA	Water	1664A	
MB 570-80577/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-80577/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-80577/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
570-32772-D-1-A MS	Matrix Spike	Total/NA	Water	1664A	
570-32772-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	

Analysis Batch: 80874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-32285-1	202006300497	Total/NA	Water	1664A	80577
MB 570-80577/1-A	Method Blank	Total/NA	Water	1664A	80577
LCS 570-80577/2-A	Lab Control Sample	Total/NA	Water	1664A	80577
LCSD 570-80577/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	80577
570-32772-D-1-A MS	Matrix Spike	Total/NA	Water	1664A	80577
570-32772-D-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	80577

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 878992

Job ID: 570-32285-1

Client Sample ID: 202006300497

Lab Sample ID: 570-32285-1

Date Collected: 06/30/20 12:27

Matrix: Water

Date Received: 07/01/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1052 mL	1000 mL	80577	07/10/20 13:34	SAL	ECL 1
Total/NA	Analysis	1664A		1			80874	07/10/20 13:34	UFLU	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 878992

Job ID: 570-32285-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 878992

Job ID: 570-32285-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 878992

Job ID: 570-32285-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-32285-1	202006300497	Water	06/30/20 12:27	07/01/20 11:30	

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32285

Submittal Form

Date: 7/1/2020

*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder # 878992 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature.



Ship To: Eurofins CalScience 7440 Lincoln Way Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 878992 Report Due: 07/15/2020

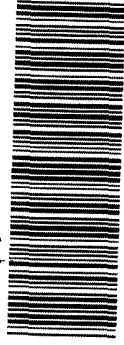
Reports: Jackie Contreras Sub-Contracting Administrator EMAIL TO: us20_subcontract@eurofinsus.com Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016 Phone (626) 386-1165 Fax (626) 386-1122 Invoices to: Eurofins Eaton Analytical, LLC Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix. Samples from: CALIFORNIA

Sample ID 202006300497 Client Sample ID for reference onl LH-INF-20200630 Sample Date & Time Matrix 06/30/20 1227 DW PWS Systemcode PWSID JLS

Sample type: EPA 1664 Sample Event: Oil and Grease by 1664(subbed) Facility ID: Sample Point ID: Static ID:

Method EPA 1664 Prep Method Analysis Requested



570-32285 Chain of Custody

Relinquished by: XCN Sample Control Date 7/1/20 Time 1130
Received by: Sample Control Date 7/1/20 Time 1130
Relinquished by: Sample Control Date Time
Received by: Sample Control Date Time

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

30/2016 SC6

Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-32285-1

Login Number: 32285

List Number: 1

Creator: Le, Danny

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 879945
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 879945
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **July 07, 2020 at 1400**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202007070502	GAC-1-20200707 Static ID: 537.1 @537.1	07/07/2020 1003
202007070503	GAC-2-20200707 Static ID: 537.1 @537.1	07/07/2020 1006
202007070504	GAC-3-20200707 Static ID: 537.1 @537.1	07/07/2020 1009
202007070505	GAC-4-20200707 Static ID: 537.1 @537.1	07/07/2020 1012
202007070506	IX-1-20200707 Static ID: 537.1 @537.1	07/07/2020 1015
202007070507	IX-2-20200707 Static ID: 537.1 @537.1	07/07/2020 1018
202007070508	IX-3-20200707 Static ID: 537.1 @537.1	07/07/2020 1021
202007070509	IX-4-20200707 Static ID: 537.1 @537.1	07/07/2020 1024
202007070511	LH-INF-20200707 @537.1 Chloride	07/07/2020 1027
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
202007070512	GAC-5-20200707 @537.1	07/07/2020 1133
202007070513	GAC-6-20200707 @537.1	07/07/2020 1136

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 879945
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **July 07, 2020 at 1400**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202007070514	GAC-7-20200707	07/07/2020 1139
	@537.1	
202007070515	GAC-8-20200707	07/07/2020 1142
	@537.1	
202007070516	IX-5-20200707	07/07/2020 1145
	@537.1	
202007070517	IX-6-20200707	07/07/2020 1148
	@537.1	
202007070518	IX-7-20200707	07/07/2020 1151
	@537.1	
202007070519	IX-8-20200707	07/07/2020 1154
	@537.1	
202007070520	MB-INF-20200707	07/07/2020 1157
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	

Test Description

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

SP145

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) RDT							
LABORATORY: Eurofins Eaton Analytical TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS		REQUESTED ANALYSES Please check box or fill in blank as needed.									
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results											
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preservation		PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME			Unpreserved	Preserved				
	GAC-1 - 20200707	7-7	1003	Water	2			X			
	GAC-2 - 20200707		1006	Water	2			X			
	GAC-3 - 20200707		1009	Water	2			X			
	GAC-4 - 20200707		1012	Water	2			X			
	IX-1 - 20200707		1015	Water	2			X			
	IX-2 - 20200707		1018	Water	2			X			
	IX-3 - 20200707		1021	Water	2			X			
	IX-4 - 20200707		1024	Water	2			X			
	LH-INF-20200707		1027	Water	5		23	X	X	X	
	LH-INF-BUFF			Water							
	GAC-5 - 20200707	7-7	1133	Water	2			X			
	GAC-6 - 20200707		1136	Water	2			X			
	GAC-7 - 20200707		1139	Water	2			X			
	GAC-8 - 20200707		1142	Water	2			X			
Relinquished by: (Signature) <i>RD Torres</i>		Received by: (Signature) <i>Chris Becke</i>		Date: 7-7-2020		Time: 1358					
Relinquished by: (Signature)		Received by: (Signature)		Date: 7-7-20		Time: 1400					
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:					

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical	PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID: PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) <u>RDT</u>	REQUESTED ANALYSES Please check box or fill in blank as needed. PFAS - full list (EPA 537.1) <input checked="" type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input checked="" type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B) <input checked="" type="checkbox"/> TOC (SM 5310C) <input checked="" type="checkbox"/> HOLD																
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS																		
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results																		
LAB USE ONLY	SAMPLE ID	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)						
	IX-5 - 20200707	7-7	1145	Water	7		7		X									
	IX-6 - 20200707	↓	1148	Water	2		2		X									
	IX-7 - 20200707	↓	1151	Water	2		2		X									
	IX-8 - 20200707	↓	1154	Water	2		2		X									
	MB-INF - 20200707	↓	1157	Water	5		23		X	X	X	X						
	MB-INF-DUP ⁵			Water														
	*FB-20200707	7-7	1200	Water	1		1											
Relinquished by: (Signature) <u>Rdt Torres</u>										Received by: (Signature) <u>Miae Jeon</u>		Date: <u>7-7-2020</u>		Time: <u>1358</u>				
Relinquished by: (Signature)										Received by: (Signature) <u>Miae Jeon</u>		Date: <u>7-7-20</u>		Time: <u>1400</u>				
Relinquished by: (Signature)										Received by: (Signature)		Date:		Time:				



Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
 Monrovia, California 91016-3629
 (626) 386-1100 FAX (866) 988-3757

Created Date & Time: 4/20/2020 5:05:42PM

Note: Sampler Please return this paper with your samples

Client ID: WRD



Project Code: 0250000 Bottle Orders
 Group Name: WRD Pilot-short list
 PO#/JOB#:

Description: WRD Pilot-short list
 Shipping Method: Pickup by client

Kit #: 262154



Created By: Sophia F Liang - [SFL]
 Deliver By: 04/22/2020
 STG: Bottle Orders

Ice Type: G
 Pre Registered

Ship Sample Kits to
 GSI Environmental Inc.
 Attn: Robert Torres
 Phone: 951-616-8406

Send Report to
 Attn:

Billing Address
 Water Replenishment District
 4040 Paramount Blvd
 Lakewood, CA 90712
 Attn: Brian Partington
 Phone: (562) 275-4245
 Fax: (562) 921-6101
 Water Replenishment District
 4040 Paramount Blvd
 Lakewood, CA 90712
 Attn: Brian Partington
 Phone: 562-275-4249
 Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
6	Total Organic Carbon	6	UN1830
6	@ANIONS48, Chloride, Sulfate	6	
6	Alkalinity in CaCO3 units	6	
12	@537.1	24	
1	@537.1	8	
2	@537.1	88	
12	@537.1 TB	12	
1	@537.1 TB	8	
2	@537.1 TB	88	
12	@537.1 FB	12	
1	@537.1 FB	8	
2	@537.1 FB	88	
Sum Tests: 63		Sum Bottles: 354	

Sum Bottles: 354

Sum Tests: 63

Comments



Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 4/20/2020 5:05:42PM

Note: Sampler Please return this paper with your samples

Kit #: 262154

Created By: Sophia F Liang - [SFL]
Deliver By: 04/22/2020

STG: Bottle Orders

Ice Type: G

Pre Registered

Client ID: WRD



Project Code: 0250000 Bottle Orders
Group Name: WRD Pilot-short list
PO#/JOB#:

Description: WRD Pilot-short list

Shipping Method: Pickup by client

Ship Sample Kits to
GSI Environmental Inc.

Attn: Robert Torres
Phone: 951-616-8406

Send Report to

Attn:

Billing Address
Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712

Attn: Brian Partington
Phone: (562) 275-4245
Fax: (562) 921-6101
Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712

Attn: Brian Partington
Phone: 562-275-4249
Fax: 562-921-6101

of Sample Tests Bottle Qty - Type [preservative information] Total UN DOT

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
SHIPPING: - CLIENT P/U WEDNESDAY, APRIL 22ND BY 12PM - PROVIDE 3 EXTRA 48 QUART COOLERS GSI SAMPLER: - PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES. - NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP. - AT THE SAMPLING SITE, OPEN THE CONTAINER LABELLED "@537.1 TB" AND POUR INTO THE EMPTY CONTAINER LABELLED "@537.1 FB". ASM: *Please also send invoices to Miae Jeon (mjeon@gsi-net.com) *Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pegalvin@gsi-net.com, and rdtorres@gsi-net.com.			

Code Status Date Shipped Via Tracking # # of Coolers Prepared By



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: SP1415

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616A (Observation = 13.3 °C) (Corr.Factor = 0.2 °C) (Final = 13.1 °C)

TYPE OF ICE: Real Synthetic No Ice Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	None/≤6	mm	Samp ID	None/≤6	mm	Samp ID	None/≤6	mm
	>6mm			>6mm			>6mm	

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
<u>Chris Beck</u>	<u>Chris Beck</u>	Eurofins Eaton Analytical	<u>7.7.20</u>	<u>1400</u>

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202007070508	<u>IX-3-20200707</u>				
07/10/2020 15:47	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
	202007070511	<u>LH-INF-20200707</u>				
07/13/2020 17:44	Alkalinity in CaCO3 units		200		mg/L	2.0
07/07/2020 21:46	Chloride		110	250	mg/L	2.5
07/07/2020 21:46	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
07/07/2020 21:46	Nitrate as NO3 (calc)		12	45	mg/L	2.2
07/10/2020 16:18	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
07/10/2020 16:18	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
07/10/2020 16:18	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
07/10/2020 16:18	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
07/10/2020 16:18	Perfluorononanoic acid (PFNA)		0.0026		ug/L	0.0020
07/10/2020 16:18	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
07/10/2020 16:18	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
07/07/2020 21:46	Sulfate		180	250	mg/L	2.5
07/07/2020 21:46	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
07/10/2020 22:46	Total Organic Carbon		0.71		mg/L	0.30
	202007070517	<u>IX-6-20200707</u>				
07/10/2020 17:15	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
	202007070518	<u>IX-7-20200707</u>				
07/14/2020 04:38	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
	202007070519	<u>IX-8-20200707</u>				
07/09/2020 13:06	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
	202007070520	<u>MB-INF-20200707</u>				
07/10/2020 13:52	Alkalinity in CaCO3 units		170		mg/L	2.0
07/07/2020 21:59	Chloride		52	250	mg/L	2.5
07/07/2020 21:59	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
07/07/2020 21:59	Nitrate as NO3 (calc)		10	45	mg/L	2.2
07/09/2020 13:15	Perfluorobutanesulfonic acid (PFBS)		0.0084		ug/L	0.0020
07/09/2020 13:15	Perfluoroheptanoic acid (PFHpA)		0.0028		ug/L	0.0020
07/09/2020 13:15	Perfluorohexanesulfonic acid (PFHxS)		0.0059		ug/L	0.0020
07/09/2020 13:15	Perfluorohexanoic acid (PFHxA)		0.0035		ug/L	0.0020
07/09/2020 13:15	Perfluorononanoic acid (PFNA)		0.0033		ug/L	0.0020
07/09/2020 13:15	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
07/09/2020 13:15	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
Fax: (626) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 879945
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Samples Received on:
07/07/2020 1400

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
07/07/2020 21:59	Sulfate		79	250	mg/L	2.5
07/07/2020 21:59	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10

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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200707 (202007070502)					Sampled on 07/07/2020 1003				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	13C2-PFDA	100	%		1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	13C2-PFHxA	117	%		1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	107	%		1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	93	%		1
07/08/20	07/10/20 15:08	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	105	%		1

GAC-2-20200707 (202007070503)					Sampled on 07/07/2020 1006				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	13C2-PFDA	87	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	13C2-PFHxA	98	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	89	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	99	%		1
07/08/20	07/10/20 15:18	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	95	%		1

GAC-3-20200707 (202007070504)

Sampled on 07/07/2020 1009

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	13C2-PFDA	98	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	13C2-PFHxA	105	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	95	%		1
07/08/20	07/10/20 14:01	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	95	%		1

GAC-4-20200707 (202007070505)

Sampled on 07/07/2020 1012

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	13C2-PFDA	96	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	13C2-PFHxA	109	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	98	%		1
07/08/20	07/10/20 14:20	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	91	%		1

IX-1-20200707 (202007070506)

Static ID: 537.1

Sampled on 07/07/2020 1015

EPA 537.1 - EPA Method 537.1

07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	13C2-PFDA	93	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	13C2-PFHxA	107	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	90	%		1
07/08/20	07/10/20 15:27	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	94	%		1

IX-2-20200707 (202007070507)

Sampled on 07/07/2020 1018

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	13C2-PFDA	87	%		1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	13C2-PFHxA	102	%		1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	93	%		1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	91	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 15:37	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	93	%		1
IX-3-20200707 (202007070508)						Sampled on 07/07/2020 1021			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	13C2-PFDA	90	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	13C2-PFHxA	103	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	91	%		1
07/08/20	07/10/20 15:47	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	96	%		1

IX-4-20200707 (202007070509)						Sampled on 07/07/2020 1024			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	13C2-PFDA	91	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	13C2-PFHxA	104	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	91	%		1
07/08/20	07/10/20 16:07	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	91	%		1

LH-INF-20200707 (202007070511)

Sampled on 07/07/2020 1027

SM 5310C - Total Organic Carbon

07/10/20 22:46	1261113	(SM 5310C)	Total Organic Carbon	0.71	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

07/07/20 21:46	1259866	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
07/07/20 21:46	1259866	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
07/07/20 21:46	1259866	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/07/20 21:46	1259866	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

07/07/20 21:46	1259877	(EPA 300.0)	Chloride	110	mg/L	2.5	5
07/07/20 21:46	1259877	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

Rounding on totals after summation.
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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0026	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	13C2-PFDA	88	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	13C2-PFHxA	103	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	88	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	94	%		1
07/08/20	07/10/20 16:18	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	92	%		1

SM 2320B - Alkalinity in CaCO3 units

07/13/20 17:44	1261170	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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GAC-5-20200707 (202007070512)

Sampled on 07/07/2020 1133

EPA 537.1 - EPA Method 537.1

07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	13C2-PFDA	87	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	13C2-PFHxA	102	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	90	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	92	%		1
07/08/20	07/10/20 16:27	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	91	%		1

GAC-6-20200707 (202007070513)

Sampled on 07/07/2020 1136

EPA 537.1 - EPA Method 537.1

07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	13C2-PFDA	89	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	13C2-PFHxA	106	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	93	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	91	%		1
07/08/20	07/10/20 16:37	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	91	%		1

GAC-7-20200707 (202007070514)

Sampled on 07/07/2020 1139

EPA 537.1 - EPA Method 537.1

07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	13C2-PFDA	93	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	13C2-PFHxA	107	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	89	%		1
07/08/20	07/10/20 16:47	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	92	%		1

GAC-8-20200707 (202007070515)

Sampled on 07/07/2020 1142

EPA 537.1 - EPA Method 537.1

07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	13C2-PFDA	88	%		1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	13C2-PFHxA	104	%		1

Rounding on totals after summation.
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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	92	%		1
07/08/20	07/10/20 16:56	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	91	%		1

IX-5-20200707 (202007070516)

Sampled on 07/07/2020 1145

EPA 537.1 - EPA Method 537.1

07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	13C2-PFDA	90	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	13C2-PFHxA	105	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	90	%		1
07/08/20	07/10/20 17:06	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	92	%		1

IX-6-20200707 (202007070517)

Sampled on 07/07/2020 1148

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	11-chloro-eicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	13C2-PFDA	92	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	13C2-PFHxA	105	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	d3-NMeFOSAA	89	%		1
07/08/20	07/10/20 17:15	1259960	1261159	(EPA 537.1)	d5-NEtFOSAA	95	%		1

IX-7-20200707 (2020070518)

Sampled on 07/07/2020 1151

EPA 537.1 - EPA Method 537.1									
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	11-chloro-eicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	13C2-PFDA	96	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	13C2-PFHxA	97	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/10/20	07/14/20 04:38	1260674	1261499	(EPA 537.1)	d5-NEtFOSAA	97	%		1

IX-8-20200707 (202007070519)

Sampled on 07/07/2020 1154

EPA 537.1 - EPA Method 537.1

07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	13C2-PFDA	90	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	13C2-PFHxA	87	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	13C2-PFOA- IS#1	131	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	13C3-HFPO-DA	80	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	13C4-PFOS- IS#2	116	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	d3-NMeFOSAA	101	%		1
07/08/20	07/09/20 13:06	1259977	1260562	(EPA 537.1)	d5-NEtFOSAA	102	%		1

MB-INF-20200707 (202007070520)

Sampled on 07/07/2020 1157

EPA 300.0 - Nitrate, Nitrite by EPA 300.0

07/07/20 21:59	1259866	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
07/07/20 21:59	1259866	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
07/07/20 21:59	1259866	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/07/20 21:59	1259866	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

07/07/20 21:59	1259877	(EPA 300.0)	Chloride	52	mg/L	2.5	5
07/07/20 21:59	1259877	(EPA 300.0)	Sulfate	79	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	4,8-dioxo-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/07/2020 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0084	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0028	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0059	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0033	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	13C2-PFDA	90	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	13C2-PFHxA	76	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	13C2-PFOA- IS#1	141	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	13C3-HFPO-DA	74	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	13C4-PFOS- IS#2	119	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/08/20	07/09/20 13:15	1259977	1260562	(EPA 537.1)	d5-NEtFOSAA	107	%		1
SM 2320B - Alkalinity in CaCO3 units									
	07/10/20 13:52		1260686	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

Rounding on totals after summation.
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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1259866

202007070511 LH-INF-20200707
 202007070520 MB-INF-20200707

Analysis Date: 07/07/2020

Analyzed by: B9PD
 Analyzed by: B9PD

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1259877

202007070511 LH-INF-20200707
 202007070520 MB-INF-20200707

Analysis Date: 07/07/2020

Analyzed by: B9PD
 Analyzed by: B9PD

EPA Method 537.1

Prep Batch: 1259977 Analytical Batch: 1260562

202007070519 IX-8-20200707
 202007070520 MB-INF-20200707

Analysis Date: 07/09/2020

Analyzed by: SZZ
 Analyzed by: SZZ

Alkalinity in CaCO3 units

Analytical Batch: 1260686

202007070520 MB-INF-20200707

Analysis Date: 07/10/2020

Analyzed by: ZB2Z

Total Organic Carbon

Analytical Batch: 1261113

202007070511 LH-INF-20200707

Analysis Date: 07/10/2020

Analyzed by: ZS6I

EPA Method 537.1

Prep Batch: 1259960 Analytical Batch: 1261159

202007070502 GAC-1-20200707
 202007070503 GAC-2-20200707
 202007070504 GAC-3-20200707
 202007070505 GAC-4-20200707
 202007070506 IX-1-20200707
 202007070507 IX-2-20200707
 202007070508 IX-3-20200707
 202007070509 IX-4-20200707
 202007070511 LH-INF-20200707
 202007070512 GAC-5-20200707
 202007070513 GAC-6-20200707
 202007070514 GAC-7-20200707
 202007070515 GAC-8-20200707
 202007070516 IX-5-20200707
 202007070517 IX-6-20200707

Analysis Date: 07/10/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
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 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

Alkalinity in CaCO3 units

Analytical Batch: 1261170

202007070511 LH-INF-20200707

Analysis Date: 07/13/2020

Analyzed by: ZB2Z

EPA Method 537.1

Prep Batch: 1260674 Analytical Batch: 1261499

202007070518 IX-7-20200707

Analysis Date: 07/14/2020

Analyzed by: KAM

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1259866					Analysis Date: 07/07/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	101	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	101	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0488	mg/L	98	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0125	mg/L	100	(50-150)		
MS_202005260570	Nitrate as Nitrogen by IC	3.6	2.6	6.28	mg/L	106	(80-120)		
MS_202007070520	Nitrate as Nitrogen by IC	2.4	6.5	9.11	mg/L	108	(80-120)		
MSD_202005260570	Nitrate as Nitrogen by IC	3.6	2.6	6.26	mg/L	105	(80-120)	20	0.39
MSD_202007070520	Nitrate as Nitrogen by IC	2.4	6.5	9.08	mg/L	107	(80-120)	20	0.34
LCS1	Nitrite Nitrogen by IC		1	1.00	mg/L	101	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.00	mg/L	100	(90-110)	20	1
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0502	mg/L	100	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0131	mg/L	105	(50-150)		
MS_202005260570	Nitrite Nitrogen by IC	ND	1	1.02	mg/L	102	(80-120)		
MS_202007070520	Nitrite Nitrogen by IC	ND	2.5	2.59	mg/L	104	(80-120)		
MSD_202005260570	Nitrite Nitrogen by IC	ND	1	1.01	mg/L	101	(80-120)	20	0.84
MSD_202007070520	Nitrite Nitrogen by IC	ND	2.5	2.58	mg/L	103	(80-120)	20	0.37
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1259877					Analysis Date: 07/07/2020				
LCS1	Chloride		25	26.3	mg/L	105	(90-110)		
LCS2	Chloride		25	26.2	mg/L	105	(90-110)	20	0.38
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.456	mg/L	91	(50-150)		
MS_202005260570	Chloride	42	26	70.1	mg/L	110	(80-120)		
MS_202007070520	Chloride	52	65	125	mg/L	116	(80-120)		
MSD_202005260570	Chloride	42	26	69.6	mg/L	108	(80-120)	20	0.71
MSD_202007070520	Chloride	52	65	124	mg/L	115	(80-120)	20	0.63
LCS1	Sulfate		50	51.4	mg/L	103	(90-110)		
LCS2	Sulfate		50	51.5	mg/L	103	(90-110)	20	0.19
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.985	mg/L	99	(50-150)		
MRL_W	Sulfate		0.25	0.247	mg/L	99	(50-150)		
MS_202005260570	Sulfate	160	50	ND	mg/L				

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202007070520	Sulfate	79	125	217	mg/L	110	(80-120)		
MSD_202005260570	Sulfate	160	50	ND	mg/L				
MSD_202007070520	Sulfate	79	125	216	mg/L	110	(80-120)	20	0.33

EPA Method 537.1 by EPA 537.1

Prep Batch: 1259977 Analytical Batch: 1260562

Analysis Date: 07/09/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0233	ug/L	99	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0226	ug/L	96	(70-130)	30	1.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00166	ug/L	89	(50-150)		
MS1_202007070018	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0225	ug/L	96	(70-130)		
MSD1_202007070018	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0231	ug/L	98	(70-130)	30	2.5
LCS1	13C2-PFDA (S)		100	97.6	%	98	(70-130)		
LCS2	13C2-PFDA (S)		100	94.2	%	94	(70-130)		
MBLK	13C2-PFDA (S)			97.4	%	97	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	91.3	%	91	(70-130)		
MS1_202007070018	13C2-PFDA (S)		100	99.5	%	100	(70-130)		
MSD1_202007070018	13C2-PFDA (S)		100	96.3	%	96	(70-130)		
LCS1	13C2-PFHxA (S)		100	103	%	103	(70-130)		
LCS2	13C2-PFHxA (S)		100	97.9	%	98	(70-130)		
MBLK	13C2-PFHxA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	93.8	%	94	(70-130)		
MS1_202007070018	13C2-PFHxA (S)		100	95.3	%	95	(70-130)		
MSD1_202007070018	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	117	%	117	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	121	%	121	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			121	%	121	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	118	%	118	(50-150)		
MS1_202007070018	13C2-PFOA- IS#1 (I)		100	116	%	117	(50-150)		
MSD1_202007070018	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	96.8	%	97	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	86.2	%	86	(70-130)		
MBLK	13C3-HFPO-DA (S)			93.0	%	93	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	87.8	%	88	(70-130)		
MS1_202007070018	13C3-HFPO-DA (S)		100	83.2	%	83	(70-130)		
MSD1_202007070018	13C3-HFPO-DA (S)		100	94.6	%	95	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	113	%	113	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C4-PFOS- IS#2 (I)			111	%	111	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	114	%	114	(50-150)		
MS1_202007070018	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
MSD1_202007070018	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0255	ug/L	108	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0241	ug/L	102	(70-130)	30	3.7
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS1_202007070018	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0239	ug/L	101	(70-130)		
MSD1_202007070018	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0251	ug/L	106	(70-130)	30	5.0
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0252	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0240	ug/L	103	(70-130)	30	4.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00186	ug/L	100	(50-150)		
MS1_202007070018	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0246	ug/L	106	(70-130)		
MSD1_202007070018	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0262	ug/L	112	(70-130)	30	6.2
LCS1	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	114	%	114	(50-150)		
MBLK	d3-NMeFOSAA (I)			113	%	113	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MS1_202007070018	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
MSD1_202007070018	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	94.9	%	95	(70-130)		
MBLK	d5-NEtFOSAA (S)			102	%	102	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.4	%	94	(70-130)		
MS1_202007070018	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MSD1_202007070018	d5-NEtFOSAA (S)		100	98.3	%	98	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0234	ug/L	93	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0210	ug/L	84	(70-130)	30	9.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00160	ug/L	80	(50-150)		
MS1_202007070018	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0183	ug/L	73	(70-130)		
MSD1_202007070018	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0222	ug/L	89	(70-130)	30	20
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0266	ug/L	106	(70-130)	30	1.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		

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Report: 879945
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202007070018	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0262	ug/L	105	(70-130)		
MSD1_202007070018	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0262	ug/L	105	(70-130)	30	0.19
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0252	ug/L	101	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0261	ug/L	104	(70-130)	30	4.3
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00208	ug/L	104	(50-150)		
MS1_202007070018	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0245	ug/L	98	(70-130)		
MSD1_202007070018	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0260	ug/L	104	(70-130)	30	6.1
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0230	ug/L	104	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0220	ug/L	100	(70-130)	30	4.4
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00172	ug/L	97	(50-150)		
MS1_202007070018	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0212	ug/L	96	(70-130)		
MSD1_202007070018	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0251	ug/L	113	(70-130)	30	17
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0248	ug/L	99	(70-130)	30	4.7
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00202	ug/L	101	(50-150)		
MS1_202007070018	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0248	ug/L	99	(70-130)		
MSD1_202007070018	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0249	ug/L	100	(70-130)	30	0.20
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0269	ug/L	107	(70-130)	30	0.37
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202007070018	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0262	ug/L	105	(70-130)		
MSD1_202007070018	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0271	ug/L	108	(70-130)	30	3.5
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0277	ug/L	111	(70-130)	30	1.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00224	ug/L	112	(50-150)		
MS1_202007070018	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0271	ug/L	108	(70-130)		
MSD1_202007070018	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0286	ug/L	114	(70-130)	30	5.5
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0250	ug/L	110	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0250	ug/L	110	(70-130)	30	0.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00204	ug/L	112	(50-150)		
MS1_202007070018	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0240	ug/L	105	(70-130)		
MSD1_202007070018	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0257	ug/L	113	(70-130)	30	6.6

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0263	ug/L	105	(70-130)	30	2.6
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00208	ug/L	104	(50-150)		
MS1_202007070018	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0234	ug/L	94	(70-130)		
MSD1_202007070018	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0275	ug/L	110	(70-130)	30	16
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0256	ug/L	103	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0254	ug/L	102	(70-130)	30	2.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00201	ug/L	100	(50-150)		
MS1_202007070018	Perfluorononanoic acid (PFNA)	ND	0.025	0.0260	ug/L	104	(70-130)		
MSD1_202007070018	Perfluorononanoic acid (PFNA)	ND	0.025	0.0258	ug/L	103	(70-130)	30	0.84
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0246	ug/L	107	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0242	ug/L	105	(70-130)	30	3.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00191	ug/L	103	(50-150)		
MS1_202007070018	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0247	ug/L	106	(70-130)		
MSD1_202007070018	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0248	ug/L	106	(70-130)	30	0.28
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0266	ug/L	106	(70-130)	30	5.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00224	ug/L	112	(50-150)		
MS1_202007070018	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0278	ug/L	110	(70-130)		
MSD1_202007070018	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0278	ug/L	111	(70-130)	30	0.14
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0246	ug/L	99	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0243	ug/L	97	(70-130)	30	2.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00186	ug/L	93	(50-150)		
MS1_202007070018	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0242	ug/L	97	(70-130)		
MSD1_202007070018	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0254	ug/L	102	(70-130)	30	4.8
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0239	ug/L	96	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0238	ug/L	95	(70-130)	30	0.84
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00181	ug/L	91	(50-150)		
MS1_202007070018	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0230	ug/L	92	(70-130)		
MSD1_202007070018	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0241	ug/L	96	(70-130)	30	4.7
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0249	ug/L	100	(70-130)	30	4.3

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00202	ug/L	101	(50-150)		
MS1_202007070018	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0241	ug/L	96	(70-130)		
MSD1_202007070018	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0250	ug/L	100	(70-130)	30	3.7

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1260686

Analysis Date: 07/10/2020

LCS1	Alkalinity in CaCO3 units		100	104	mg/L	104	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.8	mg/L	99	(90-110)	20	5.1
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.91	mg/L	96	(50-150)		
MS_202007070093	Alkalinity in CaCO3 units	180	100	282	mg/L	96	(80-120)		
MS_202007090467	Alkalinity in CaCO3 units	220	100	266	mg/L	<u>42</u>	(80-120)		
MSD_202007070093	Alkalinity in CaCO3 units	180	100	280	mg/L	95	(80-120)	20	0.64
MSD_202007090467	Alkalinity in CaCO3 units	220	100	268	mg/L	<u>44</u>	(80-120)	20	0.57

Total Organic Carbon by SM 5310C

Analytical Batch: 1261113

Analysis Date: 07/10/2020

LCS1	Total Organic Carbon		5	5.40	mg/L	108	(90-110)		
LCS2	Total Organic Carbon		5	5.44	mg/L	109	(90-110)	20	0.74
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.246	mg/L	123	(50-150)		
MS_202007070808	Total Organic Carbon	ND	4	4.41	mg/L	108	(80-120)		
MS2_202007080627	Total Organic Carbon	1.8	2	3.88	mg/L	106	(80-120)		
MSD_202007070808	Total Organic Carbon	ND	4	4.40	mg/L	108	(80-120)	20	0.23
MSD2_202007080627	Total Organic Carbon	1.8	2	3.93	mg/L	109	(80-120)	20	1.3

EPA Method 537.1 by EPA 537.1

Prep Batch: 1259960 Analytical Batch: 1261159

Analysis Date: 07/10/2020

DUP_202007070505	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0465	ug/L	99	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0500	ug/L	106	(70-130)	30	7.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00210	ug/L	112	(50-150)		
MS1_202007070504	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0236	ug/L	100	(70-130)		
DUP_202007070505	13C2-PFDA (S)			93.2	%	93	(70-130)		
LCS3	13C2-PFDA (S)		100	90.6	%	91	(70-130)		
LCS4	13C2-PFDA (S)		100	93.7	%	94	(70-130)		
MBLK	13C2-PFDA (S)			96.0	%	96	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C2-PFDA (S)		100	93.9	%	94	(70-130)		
MS1_202007070504	13C2-PFDA (S)		100	94.1	%	94	(70-130)		
DUP_202007070505	13C2-PFHxA (S)			105	%	105	(70-130)		
LCS3	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	109	%	109	(70-130)		
MS1_202007070504	13C2-PFHxA (S)		100	106	%	106	(70-130)		
DUP_202007070505	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.0	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	98.8	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.7	%	99	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS1_202007070504	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
DUP_202007070505	13C3-HFPO-DA (S)			96.3	%	96	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	96.3	%	96	(70-130)		
MBLK	13C3-HFPO-DA (S)			98.1	%	98	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	98.2	%	98	(70-130)		
MS1_202007070504	13C3-HFPO-DA (S)		100	97.0	%	97	(70-130)		
DUP_202007070505	13C4-PFOS- IS#2 (I)			92.6	%	93	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	93.4	%	93	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	94.5	%	94	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.0	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	94.3	%	94	(50-150)		
MS1_202007070504	13C4-PFOS- IS#2 (I)		100	98.3	%	98	(50-150)		
DUP_202007070505	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0492	ug/L	101	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0497	ug/L	102	(70-130)	30	1.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00232	ug/L	123	(50-150)		
MS1_202007070504	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0265	ug/L	112	(70-130)		
DUP_202007070505	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0450	ug/L	97	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0472	ug/L	101	(70-130)	30	4.8
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00205	ug/L	110	(50-150)		
MS1_202007070504	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0232	ug/L	100	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007070505	d3-NMeFOSAA (I)			96.3	%	96	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	95.5	%	95	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	98.1	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.3	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MS1_202007070504	d3-NMeFOSAA (I)		100	97.8	%	98	(50-150)		
DUP_202007070505	d5-NEtFOSAA (S)			95.9	%	96	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	90.3	%	90	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	91.6	%	92	(70-130)		
MBLK	d5-NEtFOSAA (S)			90.6	%	91	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	90.1	%	90	(70-130)		
MS1_202007070504	d5-NEtFOSAA (S)		100	93.9	%	94	(70-130)		
DUP_202007070505	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0499	ug/L	100	(70-130)	30	2.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00227	ug/L	114	(50-150)		
MS1_202007070504	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0256	ug/L	102	(70-130)		
DUP_202007070505	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0491	ug/L	98	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0488	ug/L	98	(70-130)	30	0.61
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00199	ug/L	99	(50-150)		
MS1_202007070504	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0254	ug/L	102	(70-130)		
DUP_202007070505	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0469	ug/L	94	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0484	ug/L	97	(70-130)	30	3.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS1_202007070504	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0252	ug/L	101	(70-130)		
DUP_202007070505	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0460	ug/L	104	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0463	ug/L	105	(70-130)	30	0.65
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00213	ug/L	120	(50-150)		
MS1_202007070504	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0234	ug/L	106	(70-130)		
DUP_202007070505	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0470	ug/L	94	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0497	ug/L	99	(70-130)	30	5.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00223	ug/L	111	(50-150)		
MS1_202007070504	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0255	ug/L	102	(70-130)		
DUP_202007070505	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0442	ug/L	88	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0490	ug/L	98	(70-130)	30	10
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00211	ug/L	106	(50-150)		
MS1_202007070504	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0237	ug/L	95	(70-130)		
DUP_202007070505	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0556	ug/L	111	(70-130)	30	0.54
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00261	ug/L	130	(50-150)		
MS1_202007070504	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0300	ug/L	120	(70-130)		
DUP_202007070505	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0476	ug/L	104	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0474	ug/L	104	(70-130)	30	0.42
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00216	ug/L	118	(50-150)		
MS1_202007070504	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0247	ug/L	108	(70-130)		
DUP_202007070505	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0548	ug/L	110	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0553	ug/L	111	(70-130)	30	0.91
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00263	ug/L	131	(50-150)		
MS1_202007070504	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0287	ug/L	115	(70-130)		
DUP_202007070505	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0498	ug/L	100	(70-130)	30	1.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00235	ug/L	117	(50-150)		
MS1_202007070504	Perfluorononanoic acid (PFNA)	ND	0.025	0.0263	ug/L	105	(70-130)		
DUP_202007070505	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0457	ug/L	99	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0469	ug/L	101	(70-130)	30	2.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00215	ug/L	116	(50-150)		
MS1_202007070504	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0237	ug/L	102	(70-130)		
DUP_202007070505	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0515	ug/L	103	(70-130)	30	1.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00251	ug/L	126	(50-150)		
MS1_202007070504	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0276	ug/L	110	(70-130)		
DUP_202007070505	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0527	ug/L	105	(70-130)	30	5.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00290	ug/L	145	(50-150)		
MS1_202007070504	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0266	ug/L	106	(70-130)		
DUP_202007070505	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0468	ug/L	94	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0494	ug/L	99	(70-130)	30	5.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202007070504	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0243	ug/L	97	(70-130)		
DUP_202007070505	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0463	ug/L	93	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0513	ug/L	103	(70-130)	30	10
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202007070504	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0245	ug/L	98	(70-130)		

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1261170

Analysis Date: 07/13/2020

LCS1	Alkalinity in CaCO3 units		100	97.7	mg/L	98	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.4	mg/L	98	(90-110)	20	0.71
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.86	mg/L	93	(50-150)		
MS_202007080946	Alkalinity in CaCO3 units	120	100	194	mg/L	<u>70</u>	(80-120)		
MS_202007090062	Alkalinity in CaCO3 units	110	100	172	mg/L	<u>62</u>	(80-120)		
MSD_202007080946	Alkalinity in CaCO3 units	120	100	186	mg/L	<u>63</u>	(80-120)	20	4.0
MSD_202007090062	Alkalinity in CaCO3 units	110	100	178	mg/L	<u>68</u>	(80-120)	20	3.4

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1260674 Analytical Batch: 1261499					Analysis Date: 07/14/2020				
DUP_202007090340	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0447	ug/L	95	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0442	ug/L	94	(70-130)	30	1.1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00188	ug/L	100	(50-150)		
MS2_202007090120	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0433	ug/L	92	(70-130)		
DUP_202007090340	13C2-PFDA (S)			92.5	%	93	(70-130)		
LCS3	13C2-PFDA (S)		100	91.8	%	92	(70-130)		
LCS4	13C2-PFDA (S)		100	91.9	%	92	(70-130)		
MBLK	13C2-PFDA (S)			96.2	%	96	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	90.3	%	90	(70-130)		
MS2_202007090120	13C2-PFDA (S)		100	87.0	%	87	(70-130)		
DUP_202007090340	13C2-PFHxA (S)			97.7	%	98	(70-130)		
LCS3	13C2-PFHxA (S)		100	95.2	%	95	(70-130)		
LCS4	13C2-PFHxA (S)		100	97.5	%	98	(70-130)		
MBLK	13C2-PFHxA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	96.8	%	97	(70-130)		
MS2_202007090120	13C2-PFHxA (S)		100	95.1	%	95	(70-130)		
DUP_202007090340	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MS2_202007090120	13C2-PFOA- IS#1 (I)		100	97.9	%	98	(50-150)		
DUP_202007090340	13C3-HFPO-DA (S)			94.2	%	94	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	92.8	%	93	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	94.4	%	94	(70-130)		
MBLK	13C3-HFPO-DA (S)			94.2	%	94	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	92.3	%	92	(70-130)		
MS2_202007090120	13C3-HFPO-DA (S)		100	93.5	%	93	(70-130)		
DUP_202007090340	13C4-PFOS- IS#2 (I)			96.6	%	97	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			100	%	100	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		

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Report: 879945
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007090120	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
DUP_202007090340	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0482	ug/L	99	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0485	ug/L	100	(70-130)	30	0.62
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00206	ug/L	109	(50-150)		
MS2_202007090120	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0482	ug/L	100	(70-130)		
DUP_202007090340	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0473	ug/L	101	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0477	ug/L	102	(70-130)	30	0.84
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00204	ug/L	110	(50-150)		
MS2_202007090120	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0460	ug/L	99	(70-130)		
DUP_202007090340	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MBLK	d3-NMeFOSAA (I)			101	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MS2_202007090120	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
DUP_202007090340	d5-NEtFOSAA (S)			93.0	%	93	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	92.5	%	93	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	89.3	%	89	(70-130)		
MBLK	d5-NEtFOSAA (S)			95.3	%	95	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	89.2	%	89	(70-130)		
MS2_202007090120	d5-NEtFOSAA (S)		100	83.0	%	83	(70-130)		
DUP_202007090340	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0504	ug/L	101	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0502	ug/L	100	(70-130)	30	0.40
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00204	ug/L	102	(50-150)		
MS2_202007090120	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0504	ug/L	101	(70-130)		
DUP_202007090340	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0490	ug/L	98	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0500	ug/L	100	(70-130)	30	2.2
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00206	ug/L	103	(50-150)		
MS2_202007090120	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0454	ug/L	91	(70-130)		
DUP_202007090340	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

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Report: 879945
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0507	ug/L	101	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0503	ug/L	101	(70-130)	30	0.79
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202007090120	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0471	ug/L	94	(70-130)		
DUP_202007090340	Perfluorobutanesulfonic acid (PFBS)	0.0042		0.00428	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0452	ug/L	102	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0464	ug/L	105	(70-130)	30	2.4
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00195	ug/L	110	(50-150)		
MS2_202007090120	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0463	ug/L	104	(70-130)		
DUP_202007090340	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0501	ug/L	100	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0507	ug/L	101	(70-130)	30	1.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202007090120	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0491	ug/L	98	(70-130)		
DUP_202007090340	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0497	ug/L	100	(70-130)	30	0.0
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00206	ug/L	103	(50-150)		
MS2_202007090120	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0472	ug/L	94	(70-130)		
DUP_202007090340	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0534	ug/L	107	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0530	ug/L	106	(70-130)	30	0.75
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00231	ug/L	115	(50-150)		
MS2_202007090120	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0548	ug/L	108	(70-130)		
DUP_202007090340	Perfluorohexanesulfonic acid (PFHxS)	0.020		0.0196	ug/L		(0-30)	30	0.21
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0467	ug/L	102	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0473	ug/L	104	(70-130)	30	1.3
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00197	ug/L	108	(50-150)		
MS2_202007090120	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0467	ug/L	101	(70-130)		
DUP_202007090340	Perfluorohexanoic acid (PFHxA)	0.0037		0.00382	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0529	ug/L	106	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0542	ug/L	108	(70-130)	30	2.4

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00237	ug/L	119	(50-150)		
MS2_202007090120	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0537	ug/L	104	(70-130)		
DUP_202007090340	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0538	ug/L	108	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0523	ug/L	105	(70-130)	30	2.8
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00223	ug/L	111	(50-150)		
MS2_202007090120	Perfluorononanoic acid (PFNA)	ND	0.05	0.0509	ug/L	101	(70-130)		
DUP_202007090340	Perfluorooctanesulfonic acid (PFOS)	0.025		0.0254	ug/L		(0-30)	30	2.7
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0490	ug/L	106	(70-130)	30	1.9
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00207	ug/L	112	(50-150)		
MS2_202007090120	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0496	ug/L	104	(70-130)		
DUP_202007090340	Perfluorooctanoic acid (PFOA)	0.0034		0.00360	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0536	ug/L	107	(70-130)	30	3.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00235	ug/L	118	(50-150)		
MS2_202007090120	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0545	ug/L	106	(70-130)		
DUP_202007090340	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0554	ug/L	111	(70-130)	30	0.90
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00259	ug/L	130	(50-150)		
MS2_202007090120	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0545	ug/L	108	(70-130)		
DUP_202007090340	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0512	ug/L	102	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0523	ug/L	105	(70-130)	30	2.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00215	ug/L	107	(50-150)		
MS2_202007090120	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0494	ug/L	99	(70-130)		
DUP_202007090340	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0507	ug/L	101	(70-130)	30	3.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00215	ug/L	107	(50-150)		

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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 879945
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007090120	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0492	ug/L	99	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 07/14/2020

Quant Report - Page 1 of 1

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)* (Tot, E., Coli)

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required:
Comment:
Approved by:

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 07/14/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____

Project: _____
 Phone #: _____
 Date Received: _____
 Sampled By: _____
 Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
 P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 07/14/2020

Quant Report - Page 1 of 1

Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 881682
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 881682
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:
 PO #: 5302

The following samples were received from you on **July 15, 2020 at 1252**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202007150536	GAC-1-20200715	07/15/2020 0832
	Static ID: 537.1	
	@537.1	
202007150537	GAC-2-20200715	07/15/2020 0835
	Static ID: 537.1	
	@537.1	
202007150538	GAC-3-20200715	07/15/2020 0838
	Static ID: 537.1	
	@537.1	
202007150539	GAC-4-20200715	07/15/2020 0841
	Static ID: 537.1	
	@537.1	
202007150540	IX-1-20200715	07/15/2020 0844
	Static ID: 537.1	
	@537.1	
202007150541	IX-2-20200715	07/15/2020 0847
	Static ID: 537.1	
	@537.1	
202007150542	IX-3-20200715	07/15/2020 0850
	Static ID: 537.1	
	@537.1	
202007150543	IX-4-20200715	07/15/2020 0853
	Static ID: 537.1	
	@537.1	
202007150544	LH-INF-20200715	07/15/2020 0856
	@537.1	
	Chloride	@ANIONS48
		Sulfate
		Alkalinity in CaCO3 units
		Total Organic Carbon
202007150545	GAC-5-20200715	07/15/2020 1032
	Static ID: 537.1	
	@537.1	
202007150546	GAC-6-20200715	07/15/2020 1035

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 881682
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:
PO #: 5302

The following samples were received from you on **July 15, 2020 at 1252**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	Static ID: 537.1	
	@537.1	
<u>202007150547</u>	GAC-7-20200715	07/15/2020 1038
	Static ID: 537.1	
	@537.1	
<u>202007150548</u>	GAC-8-20200715	07/15/2020 1041
	Static ID: 537.1	
	@537.1	
<u>202007150549</u>	IX-5-20200715	07/15/2020 1044
	Static ID: 537.1	
	@537.1	
<u>202007150550</u>	IX-6-20200715	07/15/2020 1047
	Static ID: 537.1	
	@537.1	
<u>202007150551</u>	IX-7-20200715	07/15/2020 1050
	Static ID: 537.1	
	@537.1	
<u>202007150552</u>	IX-8-20200715	07/15/2020 1053
	Static ID: 537.1	
	@537.1	
<u>202007150554</u>	MB-INF-20200715	07/15/2020 1056
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon

Test Description

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

881682

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302								
E-MAIL: mjeon@gsi-net.com		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang								
LABORATORY: Eurofins Eaton Analytical		GLOBAL ID:		SAMPLER(S): (PRINT) RDT								
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.										
SPECIAL INSTRUCTIONS: Send report copies to pegalwin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1-20200715	7-15	0832	Water	2		X		X			
	GAC-2-20200715		0835	Water	2		X		X			
	GAC-3-20200715		0838	Water	2		X		X			
	GAC-4-20200715		0841	Water	2		X		X			
	IX-1-20200715		0844	Water	2		X		X			
	IX-2-20200715		0847	Water	2		X		X			
	IX-3-20200715		0850	Water	2		X		X			
	IX-4-20200715		0853	Water	2		X		X			
	LH-INF-20200715		0856	Water	5	2	3		X	X	X	
	LH-INF-DUP			Water								
	GAC-5-20200715	7-15	1032	Water	2				X			
	GAC-6-20200715		1035	Water	2				X			
	GAC-7-20200715		1038	Water	2				X			
	GAC-8-20200715		1041	Water	2				X			
Relinquished by: (Signature) <i>[Signature]</i>		DATE: 7-15-2020		TIME: 1251								
Relinquished by: (Signature)		DATE: 7-15-20		TIME: 1252								
Relinquished by: (Signature)		DATE:		TIME:								

811682

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot										
PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302										
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) RDT										
LABORATORY: Eurofins Eaton Analytical		REQUESTED ANALYSES Please check box or fill in blank as needed.										
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD												
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rtorres@gsi-net.com. Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	IX-5-20200715	7-15	1044	Water	2		2		X			
	IX-6-20200715		1047	Water	2		2		X			
	IX-7-20200715		1050	Water	2		2		X			
	IX-8-20200715		1053	Water	2		2		X			
	MB-INF-20200715		1056	Water	5		23		X	X	X	
	MB-INF-DUP-20200715		1100	Water	2		2		X			
	FB			Water								
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature)		Date: <u>7-15-2020</u>		Time: <u>1251</u>						
Relinquished by: (Signature)		Received by: (Signature) <i>[Signature]</i>		Date: <u>7-15-20</u>		Time: <u>1252</u>						
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:						

750 Royal Oaks Drive, Suite 100
 Monrovia, California 91016-3629
 (626) 386-1100 FAX (866) 988-3757

Created Date & Time: 6/26/2020 12:45:40 PM

Note: Sampler Please return this paper with your samples

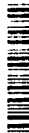
Client ID: WRD



Project Code: 0250000 Bottle Orders
 Group Name: WRD Pilot[Set#2]
 PO#/JOB#:

Description: WRD Pilot[Set#2]

Shipping Method: Pickup by client



Kit #: 266974

Created By: Anisha Zachariah - [ZR46]

Deliver By: 07/07/2020

STG: Bottle Orders

Ice Type: G

Ship Sample Kits to
 GSI Environmental Inc.
 Attn: Robert Torres
 Phone: 951-616-8406

Send Report to
 Water Replenishment District
 4040 Paramount Blvd.
 Lakewood, CA 90712
 Attn: Joseph Liles
 Phone: 562-275-4226

Billing Address
 Water Replenishment District
 Attn: Eurofins Calscience
 Water Replenishment District
 4040 Paramount Blvd
 Lakewood, CA 90712
 Attn: Brian Partington
 Phone: 562-275-4249
 Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
4	Total Organic Carbon	4	UN1830
4	@ANIONS48, Chloride, Sulfate	4	
4	Alkalinity in CaCO3 units	4	
40	@537.1	80	
2	@537.1 TB	2	
2	@537.1 FB	2	
Sum Tests: 56		Sum Bottles: 96	

Comments

SHIPPING:
 - CLIENT PIU TUESDAY, JULY 7TH MORNING
 - PACKAGE IN 4 x 32 QT COOLERS

GSI SAMPLER:

- PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES.
 - NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP.

ASM:

•Please also send invoices to Miae Jeon (mjeon@gsi-net.com)
 •Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pegalvin@gsi-net.com, and rdlorres@gsi-net.com.

INTERNAL CHAIN OF CUSTODY RECORD

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.
SAMPLES REC'D DAY OF COLLECTION? Yes / No

EEA Folder Number: 881682

IR Gun ID = 6491 (Observation = 7.5 °C) (Corr. Factor -0.3) (Final = 7.2 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: Walk-In

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date _____ Results _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(625+552), 505, SPME, @GH, 532LCMS, 558, 538, Anatoxin, LCMS methods using 40 ml vials, International clients:

Sample ID	Bottle #	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors):

RECEIVED BY: Yalen SIGNATURE: Yalen PRINT NAME: Yalen COMPANY/TITLE: Eurofins Eaton Analytical DATE: 7-15-20 TIME: 12:52

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202007150542 <u>IX-3-20200715</u>						
07/16/2020 20:45	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
202007150544 <u>LH-INF-20200715</u>						
07/20/2020 20:34	Alkalinity in CaCO3 units		200		mg/L	2.0
07/15/2020 23:45	Chloride		110	250	mg/L	2.5
07/15/2020 23:45	Nitrate as Nitrogen by IC		2.7	10	mg/L	0.50
07/15/2020 23:45	Nitrate as NO3 (calc)		12	45	mg/L	2.2
07/23/2020 13:33	Perfluorobutanesulfonic acid (PFBS)		0.0065		ug/L	0.0020
07/23/2020 13:33	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
07/23/2020 13:33	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
07/23/2020 13:33	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
07/23/2020 13:33	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
07/23/2020 13:33	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
07/23/2020 13:33	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
07/15/2020 23:45	Sulfate		170	250	mg/L	2.5
07/15/2020 23:45	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
07/18/2020 08:31	Total Organic Carbon		0.59		mg/L	0.30
202007150551 <u>IX-7-20200715</u>						
07/23/2020 14:11	Perfluorohexanoic acid (PFHxA)		0.0047		ug/L	0.0020
202007150552 <u>IX-8-20200715</u>						
07/16/2020 20:17	Perfluorohexanoic acid (PFHxA)		0.0025		ug/L	0.0020
202007150554 <u>MB-INF-20200715</u>						
07/20/2020 20:26	Alkalinity in CaCO3 units		170		mg/L	2.0
07/15/2020 23:58	Chloride		53	250	mg/L	2.5
07/15/2020 23:58	Nitrate as Nitrogen by IC		2.3	10	mg/L	0.50
07/15/2020 23:58	Nitrate as NO3 (calc)		10	45	mg/L	2.2
07/23/2020 14:20	Perfluorobutanesulfonic acid (PFBS)		0.0090		ug/L	0.0020
07/23/2020 14:20	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
07/23/2020 14:20	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
07/23/2020 14:20	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
07/23/2020 14:20	Perfluorononanoic acid (PFNA)		0.0035		ug/L	0.0020
07/23/2020 14:20	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
07/23/2020 14:20	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
07/15/2020 23:58	Sulfate		78	250	mg/L	2.5
07/15/2020 23:58	Total Nitrate, Nitrite-N, CALC		2.3		mg/L	0.10

SUMMARY OF POSITIVE DATA ONLY

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1 800 566 LABS (1 800 566 5227)

Report: 881682
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Samples Received on:
07/15/2020 1252

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
07/20/2020 21:11	Total Organic Carbon		0.72		mg/L	0.30

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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200715 (202007150536)					Sampled on 07/15/2020 0832				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.0050	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	0.0020	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	13C2-PFDA	91	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	13C2-PFHxA	95	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	13C2-PFOA- IS#1	107	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	13C3-HFPO-DA	89	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	13C4-PFOS- IS#2	105	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	d3-NMeFOSAA	102	%	1
07/16/20	07/21/20	12:43	1261964	1263388	(EPA 537.1)	d5-NEtFOSAA	91	%	1

GAC-2-20200715 (202007150537)					Sampled on 07/15/2020 0835				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
07/16/20	07/21/20	15:56	1261964	1263388	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
07/16/20	07/21/20	15:56	1261964	1263388	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	13C2-PFDA	78	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	13C2-PFHxA	89	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	13C3-HFPO-DA	78	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	d3-NMeFOSAA	105	%		1
07/16/20	07/21/20 15:56	1261964	1263388	(EPA 537.1)	d5-NEtFOSAA	86	%		1

GAC-3-20200715 (202007150538)

Sampled on 07/15/2020 0838

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	13C2-PFDA	86	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	13C2-PFHxA	96	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	13C3-HFPO-DA	85	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/16/20	07/21/20 16:06	1261964	1263388	(EPA 537.1)	d5-NEtFOSAA	87	%		1

GAC-4-20200715 (202007150539)

Sampled on 07/15/2020 0841

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	13C2-PFDA	89	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	13C2-PFHxA	100	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	13C3-HFPO-DA	90	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	d3-NMeFOSAA	103	%		1
07/16/20	07/21/20 13:02	1261964	1263388	(EPA 537.1)	d5-NEtFOSAA	87	%		1

IX-1-20200715 (202007150540)

Static ID: 537.1

Sampled on 07/15/2020 0844

EPA 537.1 - EPA Method 537.1

07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	13C2-PFDA	91	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	13C2-PFHxA	97	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	13C3-HFPO-DA	86	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/16/20	07/21/20 16:15	1261964	1263388	(EPA 537.1)	d5-NEtFOSAA	91	%		1

IX-2-20200715 (202007150541)

Sampled on 07/15/2020 0847

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	13C2-PFDA	82	%		1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	13C2-PFHxA	86	%		1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	79	%		1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	109	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/16/20 20:36	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	88	%		1
IX-3-20200715 (202007150542)						Sampled on 07/15/2020 0850			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	13C2-PFDA	80	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	13C2-PFHxA	83	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	78	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	110	%		1
07/16/20	07/16/20 20:45	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	85	%		1

IX-4-20200715 (202007150543)						Sampled on 07/15/2020 0853			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	13C2-PFDA	78	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	13C2-PFHxA	82	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	125	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	76	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	108	%		1
07/16/20	07/16/20 20:55	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	87	%		1

LH-INF-20200715 (202007150544)

Sampled on 07/15/2020 0856

SM 5310C - Total Organic Carbon

07/18/20 08:31	1262466	(SM 5310C)	Total Organic Carbon	0.59	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

07/15/20 23:45	1261861	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	0.50	5
07/15/20 23:45	1261861	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
07/15/20 23:45	1261861	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/15/20 23:45	1261861	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

07/15/20 23:45	1261864	(EPA 300.0)	Chloride	110	mg/L	2.5	5
07/15/20 23:45	1261864	(EPA 300.0)	Sulfate	170	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

Rounding on totals after summation.
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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0065	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	13C2-PFDA	93	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	13C2-PFHxA	101	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	108	%		1
07/22/20	07/23/20 13:33	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	93	%		1

SM 2320B - Alkalinity in CaCO3 units

07/20/20 20:34	1262820	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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GAC-5-20200715 (202007150545)

Sampled on 07/15/2020 1032

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	13C2-PFDA	96	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	13C2-PFHxA	108	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	97	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/22/20	07/23/20 13:42	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	103	%		1

GAC-6-20200715 (202007150546)

Sampled on 07/15/2020 1035

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	13C2-PFDA	81	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	13C2-PFHxA	87	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	79	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	107	%		1
07/16/20	07/16/20 21:24	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	87	%		1

GAC-7-20200715 (202007150547)

Sampled on 07/15/2020 1038

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	13C2-PFDA	100	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	13C2-PFHxA	106	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	97	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/22/20	07/23/20 13:52	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	104	%		1

GAC-8-20200715 (202007150548)

Sampled on 07/15/2020 1041

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	13C2-PFDA	86	%		1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	13C2-PFHxA	94	%		1

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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	82	%		1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	107	%		1
07/16/20	07/16/20 19:57	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	88	%		1

IX-5-20200715 (202007150549)

Sampled on 07/15/2020 1044

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	13C2-PFDA	99	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	13C2-PFHxA	106	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	107	%		1
07/22/20	07/23/20 14:01	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	102	%		1

IX-6-20200715 (202007150550)

Sampled on 07/15/2020 1047

Static ID: 537.1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	13C2-PFDA	81	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	13C2-PFHxA	78	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	129	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	71	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	112	%		1
07/16/20	07/16/20 22:02	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	88	%		1

IX-7-20200715 (202007150551)

Sampled on 07/15/2020 1050

Static ID: 537.1

EPA 537.1 - EPA Method 537.1									
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0047	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	13C2-PFDA	96	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	13C2-PFHxA	102	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	93	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	109	%		1
07/22/20	07/23/20 14:11	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	98	%		1

IX-8-20200715 (202007150552)

Sampled on 07/15/2020 1053

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0025	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	13C2-PFDA	77	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	13C2-PFHxA	77	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	13C2-PFOA- IS#1	133	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	13C3-HFPO-DA	71	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	d3-NMeFOSAA	112	%		1
07/16/20	07/16/20 20:17	1261953	1262313	(EPA 537.1)	d5-NEtFOSAA	89	%		1

MB-INF-20200715 (202007150554)

Sampled on 07/15/2020 1056

SM 5310C - Total Organic Carbon

07/20/20 21:11	1262802	(SM 5310C)	Total Organic Carbon	0.72	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

07/15/20 23:58	1261861	(EPA 300.0)	Nitrate as Nitrogen by IC	2.3	mg/L	0.50	5
07/15/20 23:58	1261861	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
07/15/20 23:58	1261861	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/15/20 23:58	1261861	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.3	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

07/15/20 23:58	1261864	(EPA 300.0)	Chloride	53	mg/L	2.5	5
07/15/20 23:58	1261864	(EPA 300.0)	Sulfate	78	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/15/2020 1252

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0090	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0035	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	13C2-PFDA	87	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	13C2-PFHxA	95	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	13C3-HFPO-DA	84	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	d3-NMeFOSAA	112	%		1
07/22/20	07/23/20 14:20	1263175	1263915	(EPA 537.1)	d5-NEtFOSAA	94	%		1
SM 2320B - Alkalinity in CaCO3 units									
	07/20/20 20:26		1262820	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

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Report: 881682
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1261861

202007150544 LH-INF-20200715
 202007150554 MB-INF-20200715

Analysis Date: 07/15/2020

Analyzed by: B9PD
 Analyzed by: B9PD

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1261864

202007150544 LH-INF-20200715
 202007150554 MB-INF-20200715

Analysis Date: 07/15/2020

Analyzed by: HL7J
 Analyzed by: HL7J

EPA Method 537.1

Prep Batch: 1261953 Analytical Batch: 1262313

202007150541 IX-2-20200715
 202007150542 IX-3-20200715
 202007150543 IX-4-20200715
 202007150546 GAC-6-20200715
 202007150548 GAC-8-20200715
 202007150550 IX-6-20200715
 202007150552 IX-8-20200715

Analysis Date: 07/16/2020

Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM

Total Organic Carbon

Analytical Batch: 1262466

202007150544 LH-INF-20200715

Analysis Date: 07/18/2020

Analyzed by: ZS6I

Total Organic Carbon

Analytical Batch: 1262802

202007150554 MB-INF-20200715

Analysis Date: 07/20/2020

Analyzed by: ZS6I

Alkalinity in CaCO3 units

Analytical Batch: 1262820

202007150544 LH-INF-20200715
 202007150554 MB-INF-20200715

Analysis Date: 07/20/2020

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

EPA Method 537.1

Prep Batch: 1261964 Analytical Batch: 1263388

202007150536 GAC-1-20200715
 202007150537 GAC-2-20200715
 202007150538 GAC-3-20200715
 202007150539 GAC-4-20200715
 202007150540 IX-1-20200715

Analysis Date: 07/21/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

EPA Method 537.1

Prep Batch: 1263175 Analytical Batch: 1263915

202007150544 LH-INF-20200715
 202007150545 GAC-5-20200715
 202007150547 GAC-7-20200715
 202007150549 IX-5-20200715
 202007150551 IX-7-20200715
 202007150554 MB-INF-20200715

Analysis Date: 07/23/2020

Analyzed by: KAM
 Analyzed by: KAM
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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1261861					Analysis Date: 07/15/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.59	mg/L	104	(90-110)	20	0.39
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0522	mg/L	104	(50-150)		
MRLLLW	Nitrate as Nitrogen by IC		0.013	0.0108	mg/L	86	(50-150)		
MS_202007150554	Nitrate as Nitrogen by IC	2.3	6.5	8.76	mg/L	104	(80-120)		
MS_202007150580	Nitrate as Nitrogen by IC	1.0	2.6	3.54	mg/L	101	(80-120)		
MSD_202007150554	Nitrate as Nitrogen by IC	2.3	6.5	8.69	mg/L	102	(80-120)	20	0.83
MSD_202007150580	Nitrate as Nitrogen by IC	1.0	2.6	3.54	mg/L	101	(80-120)	20	0.068
LCS1	Nitrite Nitrogen by IC		1	1.05	mg/L	105	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.05	mg/L	105	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0484	mg/L	97	(50-150)		
MRLLLW	Nitrite Nitrogen by IC		0.013	0.0138	mg/L	110	(50-150)		
MS_202007150554	Nitrite Nitrogen by IC	ND	2.5	2.53	mg/L	101	(80-120)		
MS_202007150580	Nitrite Nitrogen by IC	ND	1	1.00	mg/L	97	(80-120)		
MSD_202007150554	Nitrite Nitrogen by IC	ND	2.5	2.50	mg/L	100	(80-120)	20	1.3
MSD_202007150580	Nitrite Nitrogen by IC	ND	1	1.01	mg/L	98	(80-120)	20	0.75
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1261864					Analysis Date: 07/15/2020				
LCS1	Chloride		25	27.0	mg/L	108	(90-110)		
LCS2	Chloride		25	26.9	mg/L	108	(90-110)	20	0.37
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.467	mg/L	93	(50-150)		
MS_202007150554	Chloride	53	65	122	mg/L	111	(80-120)		
MS_202007150580	Chloride	60	26	84.7	mg/L	100	(80-120)		
MSD_202007150554	Chloride	53	65	121	mg/L	110	(80-120)	20	1.1
MSD_202007150580	Chloride	60	26	84.7	mg/L	100	(80-120)	20	0.048
LCS1	Sulfate		50	52.9	mg/L	106	(90-110)		
LCS2	Sulfate		50	52.8	mg/L	106	(90-110)	20	0.19
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.02	mg/L	102	(50-150)		
MRLLLW	Sulfate		0.25	0.266	mg/L	106	(50-150)		
MS_202007150554	Sulfate	78	125	212	mg/L	107	(80-120)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202007150580	Sulfate	74	50	127	mg/L	105	(80-120)		
MSD_202007150554	Sulfate	78	125	210	mg/L	106	(80-120)	20	0.87
MSD_202007150580	Sulfate	74	50	127	mg/L	106	(80-120)	20	0.079

EPA Method 537.1 by EPA 537.1

Prep Batch: 1261953 Analytical Batch: 1262313

Analysis Date: 07/16/2020

DUP	QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007150552		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0469	ug/L	100	(70-130)		
LCS4		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0450	ug/L	96	(70-130)	30	3.9
MBLK		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00196	ug/L	105	(50-150)		
MS1_202007150548		11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0223	ug/L	95	(70-130)		
DUP_202007150552		13C2-PFDA (S)			83.9	%	84	(70-130)		
LCS3		13C2-PFDA (S)		100	86.9	%	87	(70-130)		
LCS4		13C2-PFDA (S)		100	85.1	%	85	(70-130)		
MBLK		13C2-PFDA (S)			83.5	%	83	(70-130)		
MRL_CHK		13C2-PFDA (S)		100	87.3	%	87	(70-130)		
MS1_202007150548		13C2-PFDA (S)		100	80.8	%	81	(70-130)		
DUP_202007150552		13C2-PFHxA (S)			83.5	%	83	(70-130)		
LCS3		13C2-PFHxA (S)		100	90.6	%	91	(70-130)		
LCS4		13C2-PFHxA (S)		100	93.3	%	93	(70-130)		
MBLK		13C2-PFHxA (S)			90.8	%	91	(70-130)		
MRL_CHK		13C2-PFHxA (S)		100	95.3	%	95	(70-130)		
MS1_202007150548		13C2-PFHxA (S)		100	93.6	%	94	(70-130)		
DUP_202007150552		13C2-PFOA- IS#1 (I)			122	%	123	(50-150)		
LCS3		13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
LCS4		13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
MBLK		13C2-PFOA- IS#1 (I)			119	%	119	(50-150)		
MRL_CHK		13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MS1_202007150548		13C2-PFOA- IS#1 (I)		100	117	%	117	(50-150)		
DUP_202007150552		13C3-HFPO-DA (S)			75.5	%	76	(70-130)		
LCS3		13C3-HFPO-DA (S)		100	81.1	%	81	(70-130)		
LCS4		13C3-HFPO-DA (S)		100	82.5	%	83	(70-130)		
MBLK		13C3-HFPO-DA (S)			75.2	%	75	(70-130)		
MRL_CHK		13C3-HFPO-DA (S)		100	83.9	%	84	(70-130)		
MS1_202007150548		13C3-HFPO-DA (S)		100	78.5	%	78	(70-130)		
DUP_202007150552		13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3		13C4-PFOS- IS#2 (I)		100	97.3	%	97	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	13C4-PFOS- IS#2 (I)		100	99.6	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MS1_202007150548	13C4-PFOS- IS#2 (I)		100	99.8	%	100	(50-150)		
DUP_202007150552	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0473	ug/L	98	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0450	ug/L	93	(70-130)	30	5.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00215	ug/L	114	(50-150)		
MS1_202007150548	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0235	ug/L	100	(70-130)		
DUP_202007150552	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0490	ug/L	105	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0466	ug/L	100	(70-130)	30	5.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00211	ug/L	113	(50-150)		
MS1_202007150548	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0233	ug/L	100	(70-130)		
DUP_202007150552	d3-NMeFOSAA (I)			109	%	109	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			105	%	105	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MS1_202007150548	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
DUP_202007150552	d5-NEtFOSAA (S)			90.8	%	91	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	84.9	%	85	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	82.0	%	82	(70-130)		
MBLK	d5-NEtFOSAA (S)			87.7	%	88	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	85.5	%	85	(70-130)		
MS1_202007150548	d5-NEtFOSAA (S)		100	79.7	%	80	(70-130)		
DUP_202007150552	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0436	ug/L	87	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0429	ug/L	86	(70-130)	30	1.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00201	ug/L	100	(50-150)		
MS1_202007150548	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0220	ug/L	88	(70-130)		
DUP_202007150552	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0495	ug/L	99	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0465	ug/L	93	(70-130)	30	6.3
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS1_202007150548	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0241	ug/L	96	(70-130)		
DUP_202007150552	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0477	ug/L	96	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0453	ug/L	91	(70-130)	30	5.2
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00208	ug/L	104	(50-150)		
MS1_202007150548	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0232	ug/L	93	(70-130)		
DUP_202007150552	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0470	ug/L	106	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0449	ug/L	101	(70-130)	30	4.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00206	ug/L	116	(50-150)		
MS1_202007150548	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0241	ug/L	109	(70-130)		
DUP_202007150552	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0489	ug/L	98	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0472	ug/L	95	(70-130)	30	3.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00226	ug/L	113	(50-150)		
MS1_202007150548	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0232	ug/L	93	(70-130)		
DUP_202007150552	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0471	ug/L	94	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0458	ug/L	92	(70-130)	30	2.8
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00217	ug/L	109	(50-150)		
MS1_202007150548	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0222	ug/L	89	(70-130)		
DUP_202007150552	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0501	ug/L	100	(70-130)	30	2.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00241	ug/L	121	(50-150)		
MS1_202007150548	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0253	ug/L	101	(70-130)		
DUP_202007150552	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0480	ug/L	105	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0466	ug/L	102	(70-130)	30	3.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00217	ug/L	119	(50-150)		
MS1_202007150548	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0245	ug/L	108	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007150552	Perfluorohexanoic acid (PFHxA)	0.0025		0.00253	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0499	ug/L	100	(70-130)	30	3.7
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00241	ug/L	120	(50-150)		
MS1_202007150548	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0247	ug/L	98	(70-130)		
DUP_202007150552	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0478	ug/L	96	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0492	ug/L	98	(70-130)	30	2.9
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00230	ug/L	115	(50-150)		
MS1_202007150548	Perfluorononanoic acid (PFNA)	ND	0.025	0.0246	ug/L	98	(70-130)		
DUP_202007150552	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0457	ug/L	99	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0454	ug/L	98	(70-130)	30	0.66
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00216	ug/L	117	(50-150)		
MS1_202007150548	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0240	ug/L	104	(70-130)		
DUP_202007150552	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0525	ug/L	105	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0507	ug/L	101	(70-130)	30	3.5
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00240	ug/L	120	(50-150)		
MS1_202007150548	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0259	ug/L	103	(70-130)		
DUP_202007150552	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0457	ug/L	92	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0444	ug/L	89	(70-130)	30	2.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00198	ug/L	99	(50-150)		
MS1_202007150548	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0221	ug/L	89	(70-130)		
DUP_202007150552	Perfluorotridecanoic acid (PFTTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTTrDA)		0.05	0.0434	ug/L	87	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTTrDA)		0.05	0.0429	ug/L	86	(70-130)	30	1.4
MBLK	Perfluorotridecanoic acid (PFTTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTTrDA)		0.002	0.00192	ug/L	96	(50-150)		
MS1_202007150548	Perfluorotridecanoic acid (PFTTrDA)	ND	0.025	0.0202	ug/L	81	(70-130)		
DUP_202007150552	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0490	ug/L	98	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0473	ug/L	95	(70-130)	30	3.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00222	ug/L	111	(50-150)		
MS1_202007150548	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0236	ug/L	94	(70-130)		

Total Organic Carbon by SM 5310C

Analytical Batch: 1262466

Analysis Date: 07/18/2020

LCS1	Total Organic Carbon		5	4.87	mg/L	97	(90-110)		
LCS2	Total Organic Carbon		5	4.75	mg/L	95	(90-110)	20	2.5
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.241	mg/L	120	(50-150)		
MS_202007150502	Total Organic Carbon	2.2	4	5.86	mg/L	92	(80-120)		
MS2_202007150544	Total Organic Carbon	0.59	2	2.48	mg/L	95	(80-120)		
MSD_202007150502	Total Organic Carbon	2.2	4	5.98	mg/L	95	(80-120)	20	2.2
MSD2_202007150544	Total Organic Carbon	0.59	2	2.52	mg/L	97	(80-120)	20	1.6

Total Organic Carbon by SM 5310C

Analytical Batch: 1262802

Analysis Date: 07/20/2020

LCS1	Total Organic Carbon		5	4.92	mg/L	98	(90-110)		
LCS2	Total Organic Carbon		5	4.85	mg/L	97	(90-110)	20	1.4
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.244	mg/L	122	(50-150)		
MS_202007150645	Total Organic Carbon	2.6	4	6.30	mg/L	93	(80-120)		
MS2_202007150640	Total Organic Carbon	2.6	2	4.50	mg/L	97	(80-120)		
MSD_202007150645	Total Organic Carbon	2.6	4	6.21	mg/L	91	(80-120)	20	1.5
MSD2_202007150640	Total Organic Carbon	2.6	2	4.35	mg/L	89	(80-120)	20	3.4

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1262820

Analysis Date: 07/20/2020

LCS1	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.8	mg/L	100	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.04	mg/L	102	(50-150)		
MS_202007160383	Alkalinity in CaCO3 units	7.5	100	109	mg/L	101	(80-120)		
MS_202007170398	Alkalinity in CaCO3 units	6.3	100	106	mg/L	100	(80-120)		
MSD_202007160383	Alkalinity in CaCO3 units	7.5	100	109	mg/L	101	(80-120)	20	0.21
MSD_202007170398	Alkalinity in CaCO3 units	6.3	100	107	mg/L	100	(80-120)	20	0.91

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1261964 Analytical Batch: 1263388					Analysis Date: 07/21/2020				
DUP_202007150539	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0466	ug/L	99	(70-130)	30	4.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00252	ug/L	134	(50-150)		
MS2_202007150536	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0471	ug/L	100	(70-130)		
DUP_202007150539	13C2-PFDA (S)			91.5	%	92	(70-130)		
LCS3	13C2-PFDA (S)		100	91.4	%	91	(70-130)		
LCS4	13C2-PFDA (S)		100	91.9	%	92	(70-130)		
MBLK	13C2-PFDA (S)			88.0	%	88	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	89.7	%	90	(70-130)		
MS2_202007150536	13C2-PFDA (S)		100	89.0	%	89	(70-130)		
DUP_202007150539	13C2-PFHxA (S)			102	%	102	(70-130)		
LCS3	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFHxA (S)		100	97.2	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			97.4	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	96.3	%	96	(70-130)		
MS2_202007150536	13C2-PFHxA (S)		100	102	%	102	(70-130)		
DUP_202007150539	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
MS2_202007150536	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
DUP_202007150539	13C3-HFPO-DA (S)			89.2	%	89	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	91.1	%	91	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	88.6	%	89	(70-130)		
MBLK	13C3-HFPO-DA (S)			90.3	%	90	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	86.1	%	86	(70-130)		
MS2_202007150536	13C3-HFPO-DA (S)		100	88.3	%	88	(70-130)		
DUP_202007150539	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			100	%	100	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007150536	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
DUP_202007150539	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0491	ug/L	101	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0470	ug/L	97	(70-130)	30	4.4
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00267	ug/L	141	(50-150)		
MS2_202007150536	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0492	ug/L	101	(70-130)		
DUP_202007150539	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0491	ug/L	105	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0491	ug/L	105	(70-130)	30	0.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00267	ug/L	144	(50-150)		
MS2_202007150536	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0463	ug/L	99	(70-130)		
DUP_202007150539	d3-NMeFOSAA (I)			103	%	103	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MBLK	d3-NMeFOSAA (I)			102	%	102	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS2_202007150536	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
DUP_202007150539	d5-NEtFOSAA (S)			89.4	%	89	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	88.4	%	88	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	85.3	%	85	(70-130)		
MBLK	d5-NEtFOSAA (S)			90.3	%	90	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	88.0	%	88	(70-130)		
MS2_202007150536	d5-NEtFOSAA (S)		100	84.0	%	84	(70-130)		
DUP_202007150539	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0470	ug/L	94	(70-130)	30	4.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00256	ug/L	128	(50-150)		
MS2_202007150536	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0466	ug/L	93	(70-130)		
DUP_202007150539	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0472	ug/L	94	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0470	ug/L	94	(70-130)	30	0.43
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00271	ug/L	135	(50-150)		
MS2_202007150536	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0476	ug/L	95	(70-130)		
DUP_202007150539	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0471	ug/L	94	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0463	ug/L	93	(70-130)	30	1.7
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00272	ug/L	136	(50-150)		
MS2_202007150536	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0470	ug/L	94	(70-130)		
DUP_202007150539	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0480	ug/L	108	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0459	ug/L	104	(70-130)	30	4.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00259	ug/L	146	(50-150)		
MS2_202007150536	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0466	ug/L	105	(70-130)		
DUP_202007150539	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0531	ug/L	106	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0514	ug/L	103	(70-130)	30	3.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00278	ug/L	139	(50-150)		
MS2_202007150536	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0486	ug/L	97	(70-130)		
DUP_202007150539	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0493	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0468	ug/L	94	(70-130)	30	5.2
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00254	ug/L	127	(50-150)		
MS2_202007150536	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0464	ug/L	93	(70-130)		
DUP_202007150539	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0553	ug/L	111	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0510	ug/L	102	(70-130)	30	8.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00299	ug/L	150	(50-150)		
MS2_202007150536	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0552	ug/L	110	(70-130)		
DUP_202007150539	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0494	ug/L	108	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0471	ug/L	103	(70-130)	30	4.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00267	ug/L	146	(50-150)		
MS2_202007150536	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0475	ug/L	104	(70-130)		
DUP_202007150539	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0543	ug/L	109	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0506	ug/L	101	(70-130)	30	7.0

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00293	ug/L	147	(50-150)		
MS2_202007150536	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0524	ug/L	105	(70-130)		
DUP_202007150539	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0516	ug/L	103	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0495	ug/L	99	(70-130)	30	4.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00283	ug/L	141	(50-150)		
MS2_202007150536	Perfluorononanoic acid (PFNA)	ND	0.05	0.0482	ug/L	97	(70-130)		
DUP_202007150539	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0475	ug/L	103	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0467	ug/L	101	(70-130)	30	1.7
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00254	ug/L	137	(50-150)		
MS2_202007150536	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0461	ug/L	100	(70-130)		
DUP_202007150539	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0491	ug/L	98	(70-130)	30	4.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00291	ug/L	145	(50-150)		
MS2_202007150536	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0511	ug/L	102	(70-130)		
DUP_202007150539	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0521	ug/L	104	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0503	ug/L	101	(70-130)	30	3.5
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00297	ug/L	148	(50-150)		
MS2_202007150536	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0507	ug/L	101	(70-130)		
DUP_202007150539	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0475	ug/L	95	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0472	ug/L	94	(70-130)	30	0.63
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00249	ug/L	125	(50-150)		
MS2_202007150536	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0460	ug/L	92	(70-130)		
DUP_202007150539	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0466	ug/L	93	(70-130)	30	6.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00259	ug/L	130	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007150536	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0461	ug/L	92	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1263175 Analytical Batch: 1263915

Analysis Date: 07/23/2020

DUP_202007210809	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0475	ug/L	101	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)	30	2.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00198	ug/L	106	(50-150)		
MS_202007210808	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00195	ug/L	100	(50-150)		
DUP_202007210809	13C2-PFDA (S)			102	%	102	(70-130)		
LCS3	13C2-PFDA (S)		100	100	%	101	(70-130)		
LCS4	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			96.4	%	96	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.0	%	98	(70-130)		
MS_202007210808	13C2-PFDA (S)		100	95.6	%	96	(70-130)		
DUP_202007210809	13C2-PFHxA (S)			102	%	102	(70-130)		
LCS3	13C2-PFHxA (S)		100	106	%	106	(70-130)		
LCS4	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MBLK	13C2-PFHxA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	107	(70-130)		
MS_202007210808	13C2-PFHxA (S)		100	104	%	104	(70-130)		
DUP_202007210809	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			111	%	111	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MS_202007210808	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
DUP_202007210809	13C3-HFPO-DA (S)			98.0	%	98	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	96.5	%	96	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MBLK	13C3-HFPO-DA (S)			97.3	%	97	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	96.4	%	96	(70-130)		
MS_202007210808	13C3-HFPO-DA (S)		100	99.1	%	99	(70-130)		
DUP_202007210809	13C4-PFOS- IS#2 (I)			104	%	104	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			104	%	105	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 881682
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 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MS_202007210808	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202007210809	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0500	ug/L	103	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0526	ug/L	108	(70-130)	30	4.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00221	ug/L	117	(50-150)		
MS_202007210808	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00228	ug/L	116	(50-150)		
DUP_202007210809	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0478	ug/L	103	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0492	ug/L	106	(70-130)	30	2.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00196	ug/L	106	(50-150)		
MS_202007210808	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00202	ug/L	106	(50-150)		
DUP_202007210809	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			103	%	103	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS_202007210808	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
DUP_202007210809	d5-NEtFOSAA (S)			104	%	104	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	97.2	%	97	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MBLK	d5-NEtFOSAA (S)			103	%	103	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
MS_202007210808	d5-NEtFOSAA (S)		100	97.8	%	98	(70-130)		
DUP_202007210809	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0533	ug/L	107	(70-130)	30	6.4
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00208	ug/L	104	(50-150)		
MS_202007210808	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202007210809	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0492	ug/L	99	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0504	ug/L	101	(70-130)	30	2.2
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00207	ug/L	104	(50-150)		
MS_202007210808	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00214	ug/L	100	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 881682
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007210809	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0499	ug/L	100	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0506	ug/L	101	(70-130)	30	1.4
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS_202007210808	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00208	ug/L	95	(50-150)		
DUP_202007210809	Perfluorobutanesulfonic acid (PFBS)	0.067		0.0653	ug/L		(0-30)	30	2.1
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0468	ug/L	106	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0482	ug/L	109	(70-130)	30	3.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00197	ug/L	112	(50-150)		
MS_202007210808	Perfluorobutanesulfonic acid (PFBS)	0.047	0.0018	0.0507	ug/L	193	(50-150)		
DUP_202007210809	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0496	ug/L	99	(70-130)	30	4.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202007210808	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00211	ug/L	102	(50-150)		
DUP_202007210809	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0485	ug/L	97	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0500	ug/L	100	(70-130)	30	3.3
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00198	ug/L	99	(50-150)		
MS_202007210808	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00201	ug/L	97	(50-150)		
DUP_202007210809	Perfluoroheptanoic acid (PFHpA)	0.0025		0.00268	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0584	ug/L	117	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0593	ug/L	119	(70-130)	30	1.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00252	ug/L	126	(50-150)		
MS_202007210808	Perfluoroheptanoic acid (PFHpA)	0.011	0.002	0.0138	ug/L	123	(50-150)		
DUP_202007210809	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0470	ug/L	103	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0503	ug/L	110	(70-130)	30	6.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00213	ug/L	117	(50-150)		
MS_202007210808	Perfluorohexanesulfonic acid (PFHxS)	0.015	0.0018	0.0175	ug/L	118	(50-150)		
DUP_202007210809	Perfluorohexanoic acid (PFHxA)	0.20		0.205	ug/L		(0-30)	30	4.0
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0543	ug/L	109	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0558	ug/L	112	(70-130)	30	2.7
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00236	ug/L	118	(50-150)		
MS_202007210808	Perfluorohexanoic acid (PFHxA)	0.17	0.02	0.176	ug/L	126	(50-150)		
DUP_202007210809	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0516	ug/L	103	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0536	ug/L	107	(70-130)	30	3.8
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202007210808	Perfluorononanoic acid (PFNA)	ND	0.002	0.00230	ug/L	109	(50-150)		
DUP_202007210809	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0482	ug/L	104	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0504	ug/L	109	(70-130)	30	4.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00209	ug/L	113	(50-150)		
MS_202007210808	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00296	ug/L	109	(50-150)		
DUP_202007210809	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0547	ug/L	109	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0551	ug/L	110	(70-130)	30	0.73
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00243	ug/L	122	(50-150)		
MS_202007210808	Perfluorooctanoic acid (PFOA)	0.027	0.002	0.0285	ug/L	82	(50-150)		
DUP_202007210809	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0565	ug/L	113	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0530	ug/L	106	(70-130)	30	6.4
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00270	ug/L	135	(50-150)		
MS_202007210808	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00262	ug/L	108	(50-150)		
DUP_202007210809	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0484	ug/L	97	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0497	ug/L	99	(70-130)	30	2.4
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00201	ug/L	100	(50-150)		
MS_202007210808	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00202	ug/L	98	(50-150)		
DUP_202007210809	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0504	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0514	ug/L	103	(70-130)	30	2.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 881682
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00202	ug/L	101	(50-150)		
MS_202007210808	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00198	ug/L	95	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 07/24/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows: P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 07/24/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 07/24/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 883523
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* **NELAP/TNI Recognized Accreditation Bodies**

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 883523
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **July 24, 2020 at 1257**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202007240318	GAC-1-20200724 Static ID: 537.1 @537.1	07/24/2020 0932
202007240319	GAC-2-20200724 Static ID: 537.1 @537.1	07/24/2020 0935
202007240320	GAC-3-20200724 Static ID: 537.1 @537.1	07/24/2020 0938
202007240321	GAC-4-20200724 Static ID: 537.1 @537.1	07/24/2020 0941
202007240322	IX-1-20200724 Static ID: 537.1 @537.1	07/24/2020 0944
202007240324	IX-2-20200724 @537.1	07/24/2020 0947
202007240325	IX-3-20200724 @537.1	07/24/2020 0950
202007240326	IX-4-20200724 @537.1	07/24/2020 0953
202007240327	LH-INF-20200724 @537.1 Chloride	07/24/2020 0956
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
202007240328	GAC-5-20200724 @537.1	07/24/2020 1132
202007240329	GAC-6-20200724 @537.1	07/24/2020 1135
202007240330	GAC-7-20200724	07/24/2020 1138

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 883523
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The following samples were received from you on **July 24, 2020 at 1257**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202007240331	GAC-8-20200724	07/24/2020 1141
	@537.1	
202007240332	IX-5-20200724	07/24/2020 1144
	@537.1	
202007240333	IX-6-20200724	07/24/2020 1147
	@537.1	
202007240334	IX-7-20200724	07/24/2020 1150
	@537.1	
202007240335	IX-8-20200724	07/24/2020 1153
	@537.1	
202007240336	MB-INF-20200724	07/24/2020 1156
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon
202007240337	MB-INF-DUP-20200724	07/24/2020 1159
	@537.1	
202007240340	FB-HOLD-20200724	07/24/2020 1200
	@537.1 FB	

Test Description

@537.1 -- EPA Method 537.1

@537.1 FB -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

885723

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) RDT									
LABORATORY: Eurofins Eaton Analytical TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.											
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results													
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	
		DATE	TIME										
	GAC-1 - 20200724	7-24	0932	Water	2				X				
	GAC-2 - 20200724		0935	Water	2				X				
	GAC-3 - 20200724		0938	Water	2				X				
	GAC-4 - 20200724		0941	Water	2				X				
	IX-1 - 20200724		0944	Water	2				X				
	IX-2 - 20200724		0947	Water	2				X				
	IX-3 - 20200724		0950	Water	2				X				
	IX-4 - 20200724		0953	Water	2				X				
	LH-INF - 20200724		0956	Water	5				X				
	LH-INF-DUP			Water	2								
	GAC-5 - 20200724	7-24	1132	Water	2				X				
	GAC-6 - 20200724		1135	Water	2				X				
	GAC-7 - 20200724		1138	Water	2				X				
	GAC-8 - 20200724		1141	Water	2				X				
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 7-24-2020		Date: 7-24-2020		Date: 7-24-2020		Date: 7-24-2020		Date: 7-24-2020	
Relinquished by: (Signature)		Received by: (Signature)		Date:		Date:		Date:		Date:		Date:	
Relinquished by: (Signature)		Received by: (Signature)		Date:		Date:		Date:		Date:		Date:	

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) R-DT																																																																																																													
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LABORATORY: Eurofins Eaton Analytical		<table border="1"> <thead> <tr> <th rowspan="2">LAB USE ONLY</th> <th rowspan="2">SAMPLE ID</th> <th colspan="2">SAMPLING</th> <th rowspan="2">MATRIX</th> <th rowspan="2">NO. OF CONT.</th> <th colspan="2">Preserved</th> <th rowspan="2">Field Filtered</th> <th rowspan="2">PFAS - full list (EPA 537.1)</th> <th rowspan="2">Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)</th> <th rowspan="2">Alkalinity (as CaCO3), (SM 2320B)</th> <th rowspan="2">TOC (SM 5310C)</th> </tr> <tr> <th>DATE</th> <th>TIME</th> <th>Unpreserved</th> <th>Preserved</th> </tr> </thead> <tbody> <tr> <td></td> <td>IX-5 - 20200724</td> <td>7-24</td> <td>1144</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-6 - 20200724</td> <td></td> <td>1147</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-7 - 20200724</td> <td></td> <td>1150</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-8 - 20200724</td> <td></td> <td>1153</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>MB-INF - 20200724</td> <td></td> <td>1156</td> <td>Water</td> <td>5</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>MB-INF-DUP - 20200724</td> <td></td> <td>1159</td> <td>Water</td> <td>2</td> <td></td> <td>2</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>FB - 20200724</td> <td></td> <td>1200</td> <td>Water</td> <td>1</td> <td></td> <td>1</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preserved		Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	DATE	TIME	Unpreserved	Preserved		IX-5 - 20200724	7-24	1144	Water	2		2		X					IX-6 - 20200724		1147	Water	2		2		X					IX-7 - 20200724		1150	Water	2		2		X					IX-8 - 20200724		1153	Water	2		2		X					MB-INF - 20200724		1156	Water	5		2		X					MB-INF-DUP - 20200724		1159	Water	2		2		X					FB - 20200724		1200	Water	1		1		X			
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.			Preserved				Field Filtered	PFAS - full list (EPA 537.1)						Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)																																																																																												
		DATE	TIME			Unpreserved	Preserved																																																																																																										
	IX-5 - 20200724	7-24	1144	Water	2		2		X																																																																																																								
	IX-6 - 20200724		1147	Water	2		2		X																																																																																																								
	IX-7 - 20200724		1150	Water	2		2		X																																																																																																								
	IX-8 - 20200724		1153	Water	2		2		X																																																																																																								
	MB-INF - 20200724		1156	Water	5		2		X																																																																																																								
	MB-INF-DUP - 20200724		1159	Water	2		2		X																																																																																																								
	FB - 20200724		1200	Water	1		1		X																																																																																																								
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdforres@gsi-net.com; Provide EDD of sample results																																																																																																															
REINQUISHED BY: [Signature]		REINQUISHED BY: [Signature]		REINQUISHED BY: [Signature]																																																																																																													
RECEIVED BY: [Signature]		RECEIVED BY: [Signature]		RECEIVED BY: [Signature]																																																																																																													
DATE: 7-24-20 TIME: 12:55		DATE: 7/24/20 TIME: 12:57		DATE: 7/24/20 TIME: 12:57																																																																																																													



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 589523

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 630A (Observation = 19.3 °C) (Corr.Factor = 0.2 °C) (Final = 19.1 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
	<u>ly</u>	Eurofins Eaton Analytical	<u>7/24/20</u>	<u>12:57</u>

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 883523
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202007240325	<u>IX-3-20200724</u>				
07/29/2020 16:37	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
	202007240327	<u>LH-INF-20200724</u>				
07/30/2020 15:18	Alkalinity in CaCO3 units		200		mg/L	2.0
07/24/2020 16:16	Chloride		110	250	mg/L	2.5
07/24/2020 16:16	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
07/24/2020 16:16	Nitrate as NO3 (calc)		12	45	mg/L	2.2
07/29/2020 16:58	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
07/29/2020 16:58	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
07/29/2020 16:58	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
07/29/2020 16:58	Perfluorononanoic acid (PFNA)		0.0028		ug/L	0.0020
07/29/2020 16:58	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
07/29/2020 16:58	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
07/24/2020 16:16	Sulfate		180	250	mg/L	2.5
07/24/2020 16:16	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
07/29/2020 16:36	Total Organic Carbon		0.59		mg/L	0.30
	202007240333	<u>IX-6-20200724</u>				
07/29/2020 17:36	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
	202007240334	<u>IX-7-20200724</u>				
07/29/2020 17:46	Perfluorohexanoic acid (PFHxA)		0.0049		ug/L	0.0020
	202007240335	<u>IX-8-20200724</u>				
07/29/2020 17:55	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
	202007240336	<u>MB-INF-20200724</u>				
07/28/2020 15:02	Alkalinity in CaCO3 units		170		mg/L	2.0
07/24/2020 16:54	Chloride		52	250	mg/L	2.5
07/24/2020 16:54	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
07/24/2020 16:54	Nitrate as NO3 (calc)		11	45	mg/L	2.2
07/29/2020 18:05	Perfluorobutanesulfonic acid (PFBS)		0.0088		ug/L	0.0020
07/29/2020 18:05	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
07/29/2020 18:05	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
07/29/2020 18:05	Perfluorohexanoic acid (PFHxA)		0.0044		ug/L	0.0020
07/29/2020 18:05	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
07/29/2020 18:05	Perfluorooctanesulfonic acid (PFOS)		0.035		ug/L	0.0020
07/29/2020 18:05	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
07/24/2020 16:54	Sulfate		79	250	mg/L	2.5

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
07/24/2020 16:54	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
07/29/2020 16:52	Total Organic Carbon		0.77		mg/L	0.30
		202007240337	<u>MB-INF-DUP-20200724</u>			
07/29/2020 03:16	Perfluorobutanesulfonic acid (PFBS)		0.0090		ug/L	0.0020
07/29/2020 03:16	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
07/29/2020 03:16	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
07/29/2020 03:16	Perfluorohexanoic acid (PFHxA)		0.0045		ug/L	0.0020
07/29/2020 03:16	Perfluorononanoic acid (PFNA)		0.0035		ug/L	0.0020
07/29/2020 03:16	Perfluorooctanesulfonic acid (PFOS)		0.036		ug/L	0.0020
07/29/2020 03:16	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020

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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200724 (202007240318)					Sampled on 07/24/2020 0932				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	13C2-PFDA	99	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	13C2-PFHxA	106	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	96	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	96	%		1
07/27/20	07/29/20 15:29	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-2-20200724 (202007240319)					Sampled on 07/24/2020 0935				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	13C2-PFDA	93	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	13C2-PFHxA	100	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	92	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	94	%		1
07/27/20	07/29/20 15:39	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-3-20200724 (202007240320)

Sampled on 07/24/2020 0938

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	13C2-PFDA	96	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	13C2-PFHxA	103	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	100	%		1
07/27/20	07/29/20 15:48	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	93	%		1

GAC-4-20200724 (202007240321)

Sampled on 07/24/2020 0941

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	13C2-PFDA	96	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	13C2-PFHxA	102	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	96	%		1
07/27/20	07/29/20 15:58	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	95	%		1

IX-1-20200724 (202007240322)

Static ID: 537.1

Sampled on 07/24/2020 0944

EPA 537.1 - EPA Method 537.1

07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	13C2-PFDA	92	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	13C2-PFHxA	102	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	92	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	100	%		1
07/27/20	07/29/20 16:07	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	91	%		1

IX-2-20200724 (202007240324)

Sampled on 07/24/2020 0947

EPA 537.1 - EPA Method 537.1

07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	13C2-PFDA	98	%		1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	13C2-PFHxA	110	%		1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	100	%		1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	100	%		1

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 1 800 566 LABS (1 800 566 5227)

Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 16:17	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	99	%		1
IX-3-20200724 (202007240325)					Sampled on 07/24/2020 0950				
EPA 537.1 - EPA Method 537.1									
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	13C2-PFDA	100	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	13C2-PFHxA	104	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	99	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	102	%		1
07/27/20	07/29/20 16:37	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	99	%		1

IX-4-20200724 (202007240326)					Sampled on 07/24/2020 0953				
EPA 537.1 - EPA Method 537.1									
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	13C2-PFDA	95	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	13C2-PFHxA	106	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	98	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	102	%		1
07/27/20	07/29/20 16:48	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	98	%		1

LH-INF-20200724 (202007240327)

Sampled on 07/24/2020 0956

SM 5310C - Total Organic Carbon

07/29/20 16:36	1264923	(SM 5310C)	Total Organic Carbon	0.59	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

07/24/20 16:16	1263925	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
07/24/20 16:16	1263925	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
07/24/20 16:16	1263925	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/24/20 16:16	1263925	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

07/24/20 16:16	1263928	(EPA 300.0)	Chloride	110	mg/L	2.5	5
07/24/20 16:16	1263928	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0028	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	13C2-PFDA	92	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	13C2-PFHxA	102	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/27/20	07/29/20 16:58	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	100	%		1

SM 2320B - Alkalinity in CaCO3 units

07/30/20 15:18	1264925	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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GAC-5-20200724 (202007240328)

Sampled on 07/24/2020 1132

EPA 537.1 - EPA Method 537.1

07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	13C2-PFDA	100	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	13C2-PFHxA	106	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	99	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	103	%		1
07/27/20	07/29/20 17:08	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-6-20200724 (202007240329)

Sampled on 07/24/2020 1135

EPA 537.1 - EPA Method 537.1

07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	13C2-PFDA	97	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	13C2-PFHxA	104	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	100	%		1
07/27/20	07/29/20 17:17	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-7-20200724 (202007240330)

Sampled on 07/24/2020 1138

EPA 537.1 - EPA Method 537.1

07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	13C2-PFDA	92	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	13C2-PFHxA	103	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	95	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	91	%		1
07/27/20	07/29/20 14:32	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	93	%		1

GAC-8-20200724 (202007240331)

Sampled on 07/24/2020 1141

EPA 537.1 - EPA Method 537.1

07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	13C2-PFDA	94	%		1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	13C2-PFHxA	96	%		1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/27/20	07/29/20 17:27	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	91	%		1

IX-5-20200724 (202007240332)

Sampled on 07/24/2020 1144

EPA 537.1 - EPA Method 537.1

07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	13C2-PFDA	95	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	13C2-PFHxA	100	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	92	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	96	%		1
07/27/20	07/29/20 14:51	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	92	%		1

IX-6-20200724 (202007240333)

Sampled on 07/24/2020 1147

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	13C2-PFDA	96	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	13C2-PFHxA	104	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	93	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	107	%		1
07/27/20	07/29/20 17:36	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	96	%		1

IX-7-20200724 (202007240334)

Sampled on 07/24/2020 1150

EPA 537.1 - EPA Method 537.1									
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0049	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	13C2-PFDA	97	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	13C2-PFHxA	103	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	94	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	105	%		1
07/27/20	07/29/20 17:46	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	97	%		1

IX-8-20200724 (202007240335)

Sampled on 07/24/2020 1153

EPA 537.1 - EPA Method 537.1

07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	13C2-PFDA	95	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	13C2-PFHxA	99	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	92	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/27/20	07/29/20 17:55	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	95	%		1

MB-INF-20200724 (202007240336)

Sampled on 07/24/2020 1156

SM 5310C - Total Organic Carbon

07/29/20 16:52	1264923	(SM 5310C)	Total Organic Carbon	0.77	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

07/24/20 16:54	1263925	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
07/24/20 16:54	1263925	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
07/24/20 16:54	1263925	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/24/20 16:54	1263925	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

07/24/20 16:54	1263928	(EPA 300.0)	Chloride	52	mg/L	2.5	5
07/24/20 16:54	1263928	(EPA 300.0)	Sulfate	79	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Water Replenishment District
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Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0088	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0044	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.035	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	13C2-PFDA	100	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	13C2-PFHxA	102	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	d3-NMeFOSAA	101	%		1
07/27/20	07/29/20 18:05	1264198	1265050	(EPA 537.1)	d5-NEtFOSAA	96	%		1

SM 2320B - Alkalinity in CaCO3 units

07/28/20 15:02	1264477	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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MB-INF-DUP-20200724 (202007240337)

Sampled on 07/24/2020 1159

EPA 537.1 - EPA Method 537.1

07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0090	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0045	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0035	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.036	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	13C2-PFDA	89	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	13C2-PFHxA	91	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	13C3-HFPO-DA	88	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	d3-NMeFOSAA	112	%		1
07/28/20	07/29/20 03:16	1264381	1264899	(EPA 537.1)	d5-NEtFOSAA	89	%		1

FB-HOLD-20200724 (202007240340)

Sampled on 07/24/2020 1200

EPA 537.1 - EPA Method 537.1

07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 883523
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/24/2020 1257

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	13C2-PFDA	97	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	13C2-PFHxA	101	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	13C3-HFPO-DA	91	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	d3-NMeFOSAA	114	%		1
07/30/20	07/31/20 17:50	1265044	1265753	(EPA 537.1)	d5-NEtFOSAA	95	%		1

Rounding on totals after summation.
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Report: 883523
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1263925

202007240327 LH-INF-20200724
 202007240336 MB-INF-20200724

Analysis Date: 07/24/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1263928

202007240327 LH-INF-20200724
 202007240336 MB-INF-20200724

Analysis Date: 07/24/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Alkalinity in CaCO3 units

Analytical Batch: 1264477

202007240336 MB-INF-20200724

Analysis Date: 07/28/2020

Analyzed by: ZB2Z

EPA Method 537.1

Prep Batch: 1264381 Analytical Batch: 1264899

202007240337 MB-INF-DUP-20200724

Analysis Date: 07/29/2020

Analyzed by: KAM

Total Organic Carbon

Analytical Batch: 1264923

202007240327 LH-INF-20200724
 202007240336 MB-INF-20200724

Analysis Date: 07/29/2020

Analyzed by: ZS6I
 Analyzed by: ZS6I

Alkalinity in CaCO3 units

Analytical Batch: 1264925

202007240327 LH-INF-20200724

Analysis Date: 07/30/2020

Analyzed by: ZB2Z

EPA Method 537.1

Prep Batch: 1264198 Analytical Batch: 1265050

202007240318 GAC-1-20200724
 202007240319 GAC-2-20200724
 202007240320 GAC-3-20200724
 202007240321 GAC-4-20200724
 202007240322 IX-1-20200724
 202007240324 IX-2-20200724
 202007240325 IX-3-20200724
 202007240326 IX-4-20200724
 202007240327 LH-INF-20200724
 202007240328 GAC-5-20200724
 202007240329 GAC-6-20200724
 202007240330 GAC-7-20200724
 202007240331 GAC-8-20200724
 202007240332 IX-5-20200724
 202007240333 IX-6-20200724
 202007240334 IX-7-20200724
 202007240335 IX-8-20200724
 202007240336 MB-INF-20200724

Analysis Date: 07/29/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
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Report: 883523
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

EPA Method 537.1

Prep Batch: 1265044 Analytical Batch: 1265753
202007240340 FB-HOLD-20200724

Analysis Date: 07/31/2020
Analyzed by: KAM

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1263925					Analysis Date: 07/24/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.55	mg/L	102	(90-110)	20	0.39
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0486	mg/L	97	(50-150)		
MS_202007240026	Nitrate as Nitrogen by IC	1.6	1.3	2.94	mg/L	110	(80-120)		
MS_202007240327	Nitrate as Nitrogen by IC	2.8	6.5	9.62	mg/L	109	(80-120)		
MSD_202007240026	Nitrate as Nitrogen by IC	1.6	1.3	2.93	mg/L	110	(80-120)	20	0.24
MSD_202007240327	Nitrate as Nitrogen by IC	2.8	6.5	9.62	mg/L	109	(80-120)	20	0.055
LCS1	Nitrite Nitrogen by IC		1	0.988	mg/L	99	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.988	mg/L	99	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0438	mg/L	88	(50-150)		
MS_202007240026	Nitrite Nitrogen by IC	ND	0.5	0.507	mg/L	101	(80-120)		
MS_202007240327	Nitrite Nitrogen by IC	ND	2.5	2.45	mg/L	98	(80-120)		
MSD_202007240026	Nitrite Nitrogen by IC	ND	0.5	0.507	mg/L	101	(80-120)	20	0.020
MSD_202007240327	Nitrite Nitrogen by IC	ND	2.5	2.44	mg/L	98	(80-120)	20	0.30
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1263928					Analysis Date: 07/24/2020				
LCS1	Chloride		25	26.4	mg/L	105	(90-110)		
LCS2	Chloride		25	26.4	mg/L	106	(90-110)	20	0.38
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.454	mg/L	91	(50-150)		
MS_202007240026	Chloride	11	13	25.5	mg/L	117	(80-120)		
MS_202007240327	Chloride	110	65	179	mg/L	111	(80-120)		
MSD_202007240026	Chloride	11	13	25.4	mg/L	117	(80-120)	20	0.13
MSD_202007240327	Chloride	110	65	179	mg/L	110	(80-120)	20	0.022
LCS1	Sulfate		50	51.7	mg/L	103	(90-110)		
LCS2	Sulfate		50	51.8	mg/L	104	(90-110)	20	0.39
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.987	mg/L	99	(50-150)		
MRLW	Sulfate		0.25	0.247	mg/L	99	(50-150)		
MS_202007240026	Sulfate	6.0	25	33.8	mg/L	111	(80-120)		
MS_202007240327	Sulfate	180	125	317	mg/L	111	(80-120)		
MSD_202007240026	Sulfate	6.0	25	33.8	mg/L	111	(80-120)	20	0.004

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202007240327	Sulfate	180	125	316	mg/L	110	(80-120)	20	0.27

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1264477

Analysis Date: 07/28/2020

LCS1	Alkalinity in CaCO3 units		100	101	mg/L	101	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.6	mg/L	99	(90-110)	20	2.3
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.98	mg/L	99	(50-150)		
MS_202007270386	Alkalinity in CaCO3 units	160	100	256	mg/L	97	(80-120)		
MSD_202007270386	Alkalinity in CaCO3 units	160	100	255	mg/L	96	(80-120)	20	0.31

EPA Method 537.1 by EPA 537.1

Prep Batch: 1264381 Analytical Batch: 1264899

Analysis Date: 07/28/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0240	ug/L	102	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0234	ug/L	99	(70-130)	30	2.5
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00186	ug/L	99	(50-150)		
MS_202006190292	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00194	ug/L	103	(50-150)		
MSD_202006190292	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00192	ug/L	102	(50-150)	50	1.0
LCS1	13C2-PFDA (S)		100	97.3	%	97	(70-130)		
LCS2	13C2-PFDA (S)		100	94.7	%	95	(70-130)		
MBLK	13C2-PFDA (S)			94.0	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	92.8	%	93	(70-130)		
MS_202006190292	13C2-PFDA (S)		100	94.7	%	95	(70-130)		
MSD_202006190292	13C2-PFDA (S)		100	93.9	%	94	(70-130)		
LCS1	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS2	13C2-PFHxA (S)		100	97.5	%	98	(70-130)		
MBLK	13C2-PFHxA (S)			98.1	%	98	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MS_202006190292	13C2-PFHxA (S)		100	95.6	%	96	(70-130)		
MSD_202006190292	13C2-PFHxA (S)		100	98.2	%	98	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			109	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MS_202006190292	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
MSD_202006190292	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	99.3	%	99	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	95.2	%	95	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C3-HFPO-DA (S)			93.3	%	93	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.9	%	95	(70-130)		
MS_202006190292	13C3-HFPO-DA (S)		100	93.0	%	93	(70-130)		
MSD_202006190292	13C3-HFPO-DA (S)		100	93.9	%	94	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MS_202006190292	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
MSD_202006190292	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0263	ug/L	111	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0257	ug/L	109	(70-130)	30	2.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00228	ug/L	120	(50-150)		
MS_202006190292	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00215	ug/L	113	(50-150)		
MSD_202006190292	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00216	ug/L	114	(50-150)	50	0.84
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0256	ug/L	110	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0250	ug/L	107	(70-130)	30	2.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00199	ug/L	107	(50-150)		
MS_202006190292	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00203	ug/L	109	(50-150)		
MSD_202006190292	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00199	ug/L	107	(50-150)	50	2.1
LCS1	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			109	%	109	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MS_202006190292	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MSD_202006190292	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	92.4	%	92	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	94.1	%	94	(70-130)		
MBLK	d5-NEtFOSAA (S)			92.6	%	93	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	90.3	%	90	(70-130)		
MS_202006190292	d5-NEtFOSAA (S)		100	91.0	%	91	(70-130)		
MSD_202006190292	d5-NEtFOSAA (S)		100	91.4	%	91	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0275	ug/L	110	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0259	ug/L	104	(70-130)	30	6.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00210	ug/L	105	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202006190292	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00219	ug/L	109	(50-150)		
MSD_202006190292	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00224	ug/L	112	(50-150)	50	2.3
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0260	ug/L	104	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0259	ug/L	103	(70-130)	30	0.39
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00212	ug/L	106	(50-150)		
MS_202006190292	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202006190292	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00216	ug/L	108	(50-150)	50	0.22
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	109	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)	30	1.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00219	ug/L	110	(50-150)		
MS_202006190292	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00220	ug/L	110	(50-150)		
MSD_202006190292	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00224	ug/L	112	(50-150)	50	2.0
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0252	ug/L	114	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0244	ug/L	110	(70-130)	30	3.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00204	ug/L	116	(50-150)		
MS_202006190292	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00308	ug/L	112	(50-150)		
MSD_202006190292	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00313	ug/L	114	(50-150)	50	1.4
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0272	ug/L	109	(70-130)	30	2.9
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202006190292	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00222	ug/L	111	(50-150)		
MSD_202006190292	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00219	ug/L	110	(50-150)	50	1.2
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0253	ug/L	101	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0252	ug/L	101	(70-130)	30	0.40
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00195	ug/L	98	(50-150)		
MS_202006190292	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00210	ug/L	105	(50-150)		
MSD_202006190292	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00204	ug/L	102	(50-150)	50	2.8
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0294	ug/L	118	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0290	ug/L	116	(70-130)	30	1.4
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00254	ug/L	127	(50-150)		
MS_202006190292	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00262	ug/L	119	(50-150)		
MSD_202006190292	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00270	ug/L	123	(50-150)	50	3.2

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0261	ug/L	115	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0251	ug/L	110	(70-130)	30	3.9
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00206	ug/L	113	(50-150)		
MS_202006190292	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00211	ug/L	115	(50-150)		
MSD_202006190292	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00209	ug/L	115	(50-150)	50	0.77
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0289	ug/L	116	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0279	ug/L	112	(70-130)	30	3.5
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00246	ug/L	123	(50-150)		
MS_202006190292	Perfluorohexanoic acid (PFHxA)	0.0033	0.002	0.00562	ug/L	117	(50-150)		
MSD_202006190292	Perfluorohexanoic acid (PFHxA)	0.0033	0.002	0.00559	ug/L	116	(50-150)	50	0.50
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0291	ug/L	116	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0280	ug/L	112	(70-130)	30	3.9
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00240	ug/L	120	(50-150)		
MS_202006190292	Perfluorononanoic acid (PFNA)	ND	0.002	0.00233	ug/L	117	(50-150)		
MSD_202006190292	Perfluorononanoic acid (PFNA)	ND	0.002	0.00231	ug/L	115	(50-150)	50	0.91
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0267	ug/L	115	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0258	ug/L	111	(70-130)	30	3.4
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00218	ug/L	118	(50-150)		
MS_202006190292	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00216	ug/L	112	(50-150)		
MSD_202006190292	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00216	ug/L	112	(50-150)	50	0.059
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0288	ug/L	115	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0277	ug/L	111	(70-130)	30	3.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00249	ug/L	124	(50-150)		
MS_202006190292	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00236	ug/L	111	(50-150)		
MSD_202006190292	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00237	ug/L	112	(50-150)	50	0.36
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0266	ug/L	107	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0259	ug/L	104	(70-130)	30	2.7
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00225	ug/L	112	(50-150)		
MS_202006190292	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00228	ug/L	108	(50-150)		
MSD_202006190292	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00227	ug/L	108	(50-150)	50	0.34
LCS1	Perfluorotridecanoic acid (PFTTrDA)		0.025	0.0264	ug/L	105	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTTrDA)		0.025	0.0266	ug/L	106	(70-130)	30	0.76

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	101	(50-150)		
MS_202006190292	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00210	ug/L	105	(50-150)		
MSD_202006190292	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00209	ug/L	104	(50-150)	50	0.46
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0259	ug/L	104	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0261	ug/L	104	(70-130)	30	0.77
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202006190292	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00214	ug/L	107	(50-150)		
MSD_202006190292	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00215	ug/L	108	(50-150)	50	0.41

Total Organic Carbon by SM 5310C

Analytical Batch: 1264923

Analysis Date: 07/29/2020

LCS1	Total Organic Carbon		5	4.95	mg/L	99	(90-110)		
LCS2	Total Organic Carbon		5	4.98	mg/L	100	(90-110)	20	0.60
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.239	mg/L	119	(50-150)		
MS_202007211190	Total Organic Carbon	0.74	4	5.73	mg/L	125	(80-120)		
MS2_202007280272	Total Organic Carbon	0.40	2	2.29	mg/L	95	(80-120)		
MSD_202007211190	Total Organic Carbon	0.74	4	6.28	mg/L	138	(80-120)	20	9.2
MSD2_202007280272	Total Organic Carbon	0.40	2	2.30	mg/L	95	(80-120)	20	0.26

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1264925

Analysis Date: 07/30/2020

LCS1	Alkalinity in CaCO3 units		100	104	mg/L	105	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.2	mg/L	99	(90-110)	20	5.7
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.88	mg/L	94	(50-150)		
MS_202007290174	Alkalinity in CaCO3 units	120	100	222	mg/L	97	(80-120)		
MS_202007290270	Alkalinity in CaCO3 units	75	100	178	mg/L	103	(80-120)		
MSD_202007290174	Alkalinity in CaCO3 units	120	100	222	mg/L	97	(80-120)	20	0.072
MSD_202007290270	Alkalinity in CaCO3 units	75	100	178	mg/L	103	(80-120)	20	0.039

EPA Method 537.1 by EPA 537.1

Prep Batch: 1264198 Analytical Batch: 1265050

Analysis Date: 07/29/2020

DUP_202007240332	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0495	ug/L	105	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0493	ug/L	105	(70-130)	30	0.41
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00196	ug/L	104	(50-150)		
MS1_202007240330	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0260	ug/L	110	(70-130)		
DUP_202007240332	13C2-PFDA (S)			97.8	%	98	(70-130)		
LCS3	13C2-PFDA (S)		100	99.2	%	99	(70-130)		
LCS4	13C2-PFDA (S)		100	98.6	%	99	(70-130)		
MBLK	13C2-PFDA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.7	%	99	(70-130)		
MS1_202007240330	13C2-PFDA (S)		100	105	%	105	(70-130)		
DUP_202007240332	13C2-PFHxA (S)			106	%	106	(70-130)		
LCS3	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	94.2	%	94	(70-130)		
MS1_202007240330	13C2-PFHxA (S)		100	108	%	108	(70-130)		
DUP_202007240332	13C2-PFOA- IS#1 (I)			99.4	%	99	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.5	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			99.7	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.8	%	100	(50-150)		
MS1_202007240330	13C2-PFOA- IS#1 (I)		100	99.2	%	99	(50-150)		
DUP_202007240332	13C3-HFPO-DA (S)			95.8	%	96	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	98.8	%	99	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	98.3	%	98	(70-130)		
MBLK	13C3-HFPO-DA (S)			99.5	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	92.6	%	93	(70-130)		
MS1_202007240330	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
DUP_202007240332	13C4-PFOS- IS#2 (I)			93.9	%	94	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	96.5	%	97	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	95.4	%	95	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			97.7	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	95.6	%	96	(50-150)		
MS1_202007240330	13C4-PFOS- IS#2 (I)		100	93.3	%	93	(50-150)		
DUP_202007240332	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0493	ug/L	102	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0483	ug/L	100	(70-130)	30	2.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS1_202007240330	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0257	ug/L	109	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007240332	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0495	ug/L	106	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0482	ug/L	103	(70-130)	30	2.7
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00198	ug/L	106	(50-150)		
MS1_202007240330	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0252	ug/L	108	(70-130)		
DUP_202007240332	d3-NMeFOSAA (I)			94.4	%	94	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	96.1	%	96	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	95.4	%	95	(50-150)		
MBLK	d3-NMeFOSAA (I)			94.1	%	94	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	95.0	%	95	(50-150)		
MS1_202007240330	d3-NMeFOSAA (I)		100	93.9	%	94	(50-150)		
DUP_202007240332	d5-NEtFOSAA (S)			96.6	%	97	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	98.3	%	98	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	99.5	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			98.7	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
MS1_202007240330	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
DUP_202007240332	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0485	ug/L	97	(70-130)	30	3.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00176	ug/L	88	(50-150)		
MS1_202007240330	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202007240332	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0523	ug/L	105	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0522	ug/L	104	(70-130)	30	0.19
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00214	ug/L	107	(50-150)		
MS1_202007240330	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0268	ug/L	107	(70-130)		
DUP_202007240332	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0520	ug/L	104	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0515	ug/L	103	(70-130)	30	0.97
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	104	(50-150)		
MS1_202007240330	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0269	ug/L	108	(70-130)		
DUP_202007240332	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0440	ug/L	100	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0462	ug/L	104	(70-130)	30	4.9
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00166	ug/L	94	(50-150)		
MS1_202007240330	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0247	ug/L	112	(70-130)		
DUP_202007240332	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0498	ug/L	100	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0481	ug/L	96	(70-130)	30	3.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00206	ug/L	103	(50-150)		
MS1_202007240330	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202007240332	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0492	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0489	ug/L	98	(70-130)	30	0.61
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00195	ug/L	98	(50-150)		
MS1_202007240330	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0258	ug/L	103	(70-130)		
DUP_202007240332	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0561	ug/L	112	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0555	ug/L	111	(70-130)	30	1.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00223	ug/L	112	(50-150)		
MS1_202007240330	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0288	ug/L	115	(70-130)		
DUP_202007240332	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0502	ug/L	110	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0497	ug/L	109	(70-130)	30	1.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS1_202007240330	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0265	ug/L	116	(70-130)		
DUP_202007240332	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0514	ug/L	103	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0520	ug/L	104	(70-130)	30	1.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00192	ug/L	96	(50-150)		
MS1_202007240330	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0271	ug/L	108	(70-130)		
DUP_202007240332	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0513	ug/L	103	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0506	ug/L	101	(70-130)	30	1.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00205	ug/L	102	(50-150)		
MS1_202007240330	Perfluorononanoic acid (PFNA)	ND	0.025	0.0264	ug/L	106	(70-130)		
DUP_202007240332	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0497	ug/L	107	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0489	ug/L	106	(70-130)	30	1.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00202	ug/L	109	(50-150)		
MS1_202007240330	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0255	ug/L	110	(70-130)		
DUP_202007240332	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0535	ug/L	107	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0517	ug/L	103	(70-130)	30	3.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00215	ug/L	108	(50-150)		
MS1_202007240330	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0278	ug/L	111	(70-130)		
DUP_202007240332	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0578	ug/L	116	(70-130)	30	9.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00216	ug/L	108	(50-150)		
MS1_202007240330	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0309	ug/L	123	(70-130)		
DUP_202007240332	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0484	ug/L	97	(70-130)	30	2.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00200	ug/L	100	(50-150)		
MS1_202007240330	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0257	ug/L	103	(70-130)		
DUP_202007240332	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0473	ug/L	95	(70-130)	30	5.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202007240330	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0253	ug/L	101	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1265044 Analytical Batch: 1265753

Analysis Date: 07/31/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0469	ug/L	100	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0489	ug/L	104	(70-130)	30	4.2
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00200	ug/L	106	(50-150)		
MS1_202007290407	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0246	ug/L	105	(70-130)		
MSD1_202007290407	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0256	ug/L	109	(70-130)	30	3.9
LCS3	13C2-PFDA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFDA (S)		100	98.0	%	98	(70-130)		
MBLK	13C2-PFDA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.8	%	99	(70-130)		
MS1_202007290407	13C2-PFDA (S)		100	98.2	%	98	(70-130)		
MSD1_202007290407	13C2-PFDA (S)		100	97.4	%	97	(70-130)		
LCS3	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFHxA (S)		100	104	%	104	(70-130)		
MBLK	13C2-PFHxA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MS1_202007290407	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MSD1_202007290407	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			109	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MS1_202007290407	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
MSD1_202007290407	13C2-PFOA- IS#1 (I)		100	108	%	109	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	99.9	%	100	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
MBLK	13C3-HFPO-DA (S)			98.4	%	98	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	93.9	%	94	(70-130)		
MS1_202007290407	13C3-HFPO-DA (S)		100	94.9	%	95	(70-130)		
MSD1_202007290407	13C3-HFPO-DA (S)		100	97.0	%	97	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			105	%	105	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
MS1_202007290407	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
MSD1_202007290407	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0500	ug/L	103	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0478	ug/L	99	(70-130)	30	4.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00207	ug/L	110	(50-150)		
MS1_202007290407	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0254	ug/L	108	(70-130)		

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202007290407	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0254	ug/L	107	(70-130)	30	0.18
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0471	ug/L	101	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0472	ug/L	101	(70-130)	30	0.21
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00192	ug/L	103	(50-150)		
MS1_202007290407	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0239	ug/L	103	(70-130)		
MSD1_202007290407	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0250	ug/L	108	(70-130)	30	4.5
LCS3	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MS1_202007290407	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MSD1_202007290407	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	99.4	%	99	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	97.7	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			99.4	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	99.8	%	100	(70-130)		
MS1_202007290407	d5-NEtFOSAA (S)		100	95.9	%	96	(70-130)		
MSD1_202007290407	d5-NEtFOSAA (S)		100	97.7	%	98	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0488	ug/L	98	(70-130)	30	4.4
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00199	ug/L	100	(50-150)		
MS1_202007290407	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0245	ug/L	98	(70-130)		
MSD1_202007290407	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0254	ug/L	102	(70-130)	30	3.6
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0510	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0505	ug/L	101	(70-130)	30	0.99
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS1_202007290407	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0259	ug/L	104	(70-130)		
MSD1_202007290407	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0254	ug/L	102	(70-130)	30	2.0
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0532	ug/L	106	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0507	ug/L	101	(70-130)	30	4.8
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS1_202007290407	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0265	ug/L	106	(70-130)		
MSD1_202007290407	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0256	ug/L	102	(70-130)	30	3.4
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0459	ug/L	104	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0459	ug/L	104	(70-130)	30	0.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00194	ug/L	110	(50-150)		
MS1_202007290407	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0243	ug/L	110	(70-130)		
MSD1_202007290407	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0247	ug/L	112	(70-130)	30	1.7
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0514	ug/L	103	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0493	ug/L	99	(70-130)	30	4.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00210	ug/L	105	(50-150)		
MS1_202007290407	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0252	ug/L	101	(70-130)		
MSD1_202007290407	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0263	ug/L	105	(70-130)	30	4.3
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0483	ug/L	97	(70-130)	30	2.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00212	ug/L	106	(50-150)		
MS1_202007290407	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0253	ug/L	101	(70-130)		
MSD1_202007290407	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0248	ug/L	99	(70-130)	30	2.1
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0566	ug/L	113	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0537	ug/L	107	(70-130)	30	5.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00226	ug/L	113	(50-150)		
MS1_202007290407	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0281	ug/L	112	(70-130)		
MSD1_202007290407	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0284	ug/L	114	(70-130)	30	1.0
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0487	ug/L	107	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0490	ug/L	108	(70-130)	30	0.61
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS1_202007290407	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0251	ug/L	110	(70-130)		
MSD1_202007290407	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0259	ug/L	114	(70-130)	30	3.2
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0539	ug/L	108	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0514	ug/L	103	(70-130)	30	4.5
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00212	ug/L	106	(50-150)		
MS1_202007290407	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0257	ug/L	102	(70-130)		
MSD1_202007290407	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0270	ug/L	108	(70-130)	30	5.0
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0514	ug/L	103	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0504	ug/L	101	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 883523
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00215	ug/L	108	(50-150)		
MS1_202007290407	Perfluorononanoic acid (PFNA)	ND	0.025	0.0262	ug/L	105	(70-130)		
MSD1_202007290407	Perfluorononanoic acid (PFNA)	ND	0.025	0.0262	ug/L	105	(70-130)	30	0.22
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0478	ug/L	103	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)	30	0.63
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00195	ug/L	106	(50-150)		
MS1_202007290407	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0240	ug/L	104	(70-130)		
MSD1_202007290407	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0254	ug/L	110	(70-130)	30	5.5
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0522	ug/L	104	(70-130)	30	1.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00232	ug/L	116	(50-150)		
MS1_202007290407	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0267	ug/L	107	(70-130)		
MSD1_202007290407	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0267	ug/L	107	(70-130)	30	0.15
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0610	ug/L	122	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0623	ug/L	125	(70-130)	30	2.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00262	ug/L	131	(50-150)		
MS1_202007290407	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0315	ug/L	126	(70-130)		
MSD1_202007290407	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0303	ug/L	121	(70-130)	30	4.0
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0501	ug/L	100	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0504	ug/L	101	(70-130)	30	0.60
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00206	ug/L	103	(50-150)		
MS1_202007290407	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0256	ug/L	102	(70-130)		
MSD1_202007290407	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0258	ug/L	103	(70-130)	30	0.87
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0527	ug/L	105	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0484	ug/L	97	(70-130)	30	8.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00207	ug/L	104	(50-150)		
MS1_202007290407	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0244	ug/L	98	(70-130)		
MSD1_202007290407	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0254	ug/L	102	(70-130)	30	3.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 08/04/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 08/04/2020

, Tel Fax

Report of Analysis by 24-Hour Collert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)* (Tot, E., Coli)

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 08/04/2020

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Report of Analysis by 18-Hour Collilert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

Colilert Report - Page 1 of 1



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 08/04/2020

Quant Report - Page 1 of 1

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Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 884399
Project: 0250000
Group: WRD Pilot [Set #1]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 884399
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **July 30, 2020 at 1430**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202007300278</u>	GAC-1M-20200730	07/30/2020 1003
	@537.1	
<u>202007300279</u>	GAC-2M-20200730	07/30/2020 1006
	@537.1	
<u>202007300280</u>	GAC-3M-20200730	07/30/2020 1009
	@537.1	
<u>202007300281</u>	GAC-4M-20200730	07/30/2020 1012
	@537.1	
<u>202007300282</u>	IX-1M-20200730	07/30/2020 1015
	@537.1	
<u>202007300283</u>	IX-2M-20200730	07/30/2020 1018
	@537.1	
<u>202007300284</u>	IX-3M-20200730	07/30/2020 1021
	@537.1	
<u>202007300285</u>	IX-4M-20200730	07/30/2020 1024
	@537.1	
<u>202007300286</u>	LH-INF-20200730	07/30/2020 1027
	@537.1	
	@VOASDWA	
	Calcium Total ICAP	
	Hexavalent chromium(Dissolved)	
	Manganese Total ICAP/MS	
	Potassium Total ICAP	
	Total Dissolved Solid (TDS)	
	Total Suspended Solids (TSS)	
	@ANIONS48	
	Alkalinity in CaCO3 units	
	Chloride	
	Iron Total ICAP	
	Oil and Grease by 1664(subbed)	
	Sodium Total ICAP	
	Total Hardness as CaCO3 by ICP	
	Uranium by ICPMS as pCi/L	
	@QUANT2000 18HR	
	Arsenic Total ICAP/MS	
	Heterotrophic Plate Count	
	Magnesium Total ICAP	
	Perchlorate	
	Sulfate	
	Total Organic Carbon	
	Uranium ICAP/MS	
<u>202007300287</u>	LH-INF-DUP-20200730	07/30/2020 1030
	@537.1	
<u>202007300288</u>	GAC-5M-20200730	07/30/2020 1203

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 884399
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **July 30, 2020 at 1430**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
<u>202007300289</u>	GAC-6M-20200730	07/30/2020 1206
	@537.1	
<u>202007300290</u>	GAC-7M-20200730	07/30/2020 1209
	@537.1	
<u>202007300291</u>	GAC-8M-20200730	07/30/2020 1212
	@537.1	
<u>202007300292</u>	IX-5M-20200730	07/30/2020 1215
	@537.1	
<u>202007300293</u>	IX-6M-20200730	07/30/2020 1218
	@537.1	
<u>202007300294</u>	IX-7M-20200730	07/30/2020 1221
	@537.1	
<u>202007300295</u>	IX-8M-20200730	07/30/2020 1224
	@537.1	
<u>202007300296</u>	MB-INF-20200730	07/30/2020 1227
	@537.1	
	@ANIONS48	@QUANT2000 18HR
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Heterotrophic Plate Count
	Iron Total ICAP	Magnesium Total ICAP
	Oil and Grease by 1664(subbed)	Perchlorate
	Sodium Total ICAP	Sulfate
	Total Hardness as CaCO3 by ICP	Total Organic Carbon
	Uranium by ICPMS as pCi/L	Uranium ICAP/MS
<u>202007300297</u>	FB-20200730	07/30/2020 1230
	@537.1 FB	
<u>202007300298</u>	LH-EFF-20200730	07/30/2020 1033
	@QUANT2000 18HR	Heterotrophic Plate Count
<u>202007300299</u>	MB-EFF-20200730	07/30/2020 1233

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 884399
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **July 30, 2020 at 1430**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@QUANT2000 18HR	Heterotrophic Plate Count

Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0
- @QUANT2000 18HR -- Quantitray Coliforms 18 Hour
- @VOASDWA -- Volatile Organics by GCMS

*8051
10/27/20
1508*

801399

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302	
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang	
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) <i>RDT</i>	
LABORATORY: Eurofins Eaton Analytical		MATERIALS: (PRINT)		REQUSTED ANALYSES	
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD		NO. OF CONT.		Please check box or fill in blank as needed.	
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results		MATERIALS		Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	
LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	Field Filtered
	GAC-1M - 20200730	7-30	1003	Water	Preserved
	GAC-2M - 20200730		1006	Water	Unpreserved
	GAC-3M - 20200730		1009	Water	
	GAC-4M - 20200730		1012	Water	
	IX-1M - 20200730		1015	Water	
	IX-2M - 20200730		1018	Water	
	IX-3M - 20200730		1021	Water	
	IX-4M - 20200730		1024	Water	
	LH-INF - 20200730		1027	Water	
	LH-INF-DUP - 20200730		1030	Water	
	GAC-5M - 20200730		1203	Water	
	GAC-6M - 20200730		1206	Water	
	GAC-7M - 20200730		1209	Water	
	GAC-8M - 20200730		1212	Water	
Relinquished by: (Signature) <i>Rodriguez</i>		Received by: (Signature)		Date: 7-30-2020	
Relinquished by: (Signature)		Received by: (Signature)		Time: 1430	
Relinquished by: (Signature)		Received by: (Signature)		Date:	
Relinquished by: (Signature)		Received by: (Signature)		Time:	

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302																	
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang																	
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) RDT																	
LABORATORY: Eurofins Eaton Analytical		UNPRESERVED		REQUESTED ANALYSES																	
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		PRESERVED		Please check box or fill in blank as needed.																	
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rtorres@gsi-net.com; Provide EDD of sample results		FIELD FILTERED		PFAS - full list (EPA 537.1)																	
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)	Total Coliform (MFM/100ml)	Total Coliform (SM 9215B)	F. Coli (MFM/100ml)	
		DATE	TIME																		
	IX-5M-20200730	7-30	12:15	Water	2	X					X	X	X	X	X	X	X	X	X	X	
	IX-6M-20200730		12:18	Water	2	X					X	X	X	X	X	X	X	X	X	X	
	IX-7M-20200730		12:21	Water	2	X					X	X	X	X	X	X	X	X	X	X	
	IX-8M-20200730		12:24	Water	2	X					X	X	X	X	X	X	X	X	X	X	
	MB-INF-20200730		12:27	Water	15	X					X	X	X	X	X	X	X	X	X	X	
	MB-INF-DUP ²⁵			Water																	
	FB-20200730	7-30	12:30	Water	1																
	LH-EFF-20200730	7-30	10:33	Water	1																
	MB-EFF-20200730	7-30	12:33	Water	1																
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 7-30-2020		Time: 14:30															
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:															
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:															

*1505
07/30/20*

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 501201

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 63019 (Observation = 11.9 °C) (Corr. Factor = 0.2 °C) (Final = 11.7 °C)

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
 Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: [Signature] PRINT NAME: FIREL Macc2 COMPANY/TITLE: Eurofins Eaton Analytical DATE: 7.30.20 TIME: 1530

Tel: (626) 386-1100
Fax: (626) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 884399
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Flags Legend:

LK - The associated blank spike recovery was above method acceptance limits. This target analyte was not detected in the sample.

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

R2 - RPD/RSD exceeded the laboratory acceptance limit. See case narrative.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202007300282 IX-1M-20200730						
08/03/2020 23:53	Perfluorooctanoic acid (PFOA)		0.0044		ug/L	0.0020
202007300283 IX-2M-20200730						
08/04/2020 00:03	Perfluorohexanoic acid (PFHxA)		0.0024		ug/L	0.0020
08/04/2020 00:03	Perfluorooctanoic acid (PFOA)		0.0026		ug/L	0.0020
202007300284 IX-3M-20200730						
08/04/2020 00:13	Perfluorohexanoic acid (PFHxA)		0.0024		ug/L	0.0020
08/04/2020 00:13	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
202007300285 IX-4M-20200730						
08/04/2020 00:22	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
08/04/2020 00:22	Perfluorooctanoic acid (PFOA)		0.0023		ug/L	0.0020
202007300286 LH-INF-20200730						
07/31/2020 21:17	Alkalinity in CaCO3 units		200		mg/L	2.0
08/05/2020 18:06	Arsenic Total ICAP/MS		3.3	10	ug/L	1.0
07/31/2020 13:40	Calcium Total ICAP		110		mg/L	1.0
07/30/2020 20:43	Chloride		110	250	mg/L	2.5
08/05/2020 19:48	Chloroform (Trichloromethane)		0.54		ug/L	0.50
08/01/2020 17:20	Heterotrophic Plate Count		4100		CFU/ml	1.0
08/10/2020 15:04	Hexavalent chromium(Dissolved)		0.67		ug/L	0.020
07/31/2020 13:40	Magnesium Total ICAP		21		mg/L	0.10
07/30/2020 20:43	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
07/30/2020 20:43	Nitrate as NO3 (calc)		12	45	mg/L	2.2
08/05/2020 14:53	Oil and Grease by 1664(subbed)		2.38		mg/L	0.95
08/04/2020 00:32	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
08/04/2020 00:32	Perfluorohexanesulfonic acid (PFHxS)		0.0061		ug/L	0.0020
08/04/2020 00:32	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
08/04/2020 00:32	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
08/04/2020 00:32	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
08/04/2020 00:32	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
07/31/2020 13:40	Potassium Total ICAP		4.7		mg/L	1.0
07/31/2020 13:40	Sodium Total ICAP		71		mg/L	1.0
07/30/2020 20:43	Sulfate		180	250	mg/L	2.5
08/05/2020 23:11	Total Dissolved Solids (TDS)		650	500	mg/L	10
07/31/2020 15:58	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
07/30/2020 20:43	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/05/2020 21:16	Total Organic Carbon		0.64		mg/L	0.30
08/05/2020 19:48	Total THM		0.54	80	ug/L	0.50
08/04/2020 14:53	Uranium by ICPMS as pCi/L		3.8		pCi/L	0.70
07/31/2020 23:36	Uranium ICAP/MS		5.6	30	ug/L	1.0
202007300287 <u>LH-INF-DUP-20200730</u>						
08/03/2020 21:20	Perfluorobutanesulfonic acid (PFBS)		0.0058		ug/L	0.0020
08/03/2020 21:20	Perfluorohexanesulfonic acid (PFHxS)		0.0059		ug/L	0.0020
08/03/2020 21:20	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
08/03/2020 21:20	Perfluorononanoic acid (PFNA)		0.0032		ug/L	0.0020
08/03/2020 21:20	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
08/03/2020 21:20	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
202007300288 <u>GAC-5M-20200730</u>						
08/04/2020 00:41	Perfluorobutanesulfonic acid (PFBS)		0.0035		ug/L	0.0020
08/04/2020 00:41	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
08/04/2020 00:41	Perfluorooctanesulfonic acid (PFOS)		0.0027		ug/L	0.0020
08/04/2020 00:41	Perfluorooctanoic acid (PFOA)		0.0035		ug/L	0.0020
202007300289 <u>GAC-6M-20200730</u>						
08/03/2020 21:39	Perfluorobutanesulfonic acid (PFBS)		0.0065		ug/L	0.0020
08/03/2020 21:39	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
202007300290 <u>GAC-7M-20200730</u>						
08/04/2020 00:51	Perfluorobutanesulfonic acid (PFBS)		0.0052		ug/L	0.0020
08/04/2020 00:51	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
08/04/2020 00:51	Perfluorooctanoic acid (PFOA)		0.0022		ug/L	0.0020
202007300291 <u>GAC-8M-20200730</u>						
08/04/2020 15:58	Perfluorobutanesulfonic acid (PFBS)		0.0028		ug/L	0.0020
08/04/2020 15:58	Perfluorooctanesulfonic acid (PFOS)		0.0024		ug/L	0.0020
08/04/2020 15:58	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
202007300292 <u>IX-5M-20200730</u>						
08/04/2020 16:08	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
08/04/2020 16:08	Perfluorooctanoic acid (PFOA)		0.0042		ug/L	0.0020
202007300293 <u>IX-6M-20200730</u>						
08/04/2020 16:17	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
08/04/2020 16:17	Perfluorooctanoic acid (PFOA)		0.0050		ug/L	0.0020
202007300294 <u>IX-7M-20200730</u>						

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/04/2020 16:36	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
08/04/2020 16:36	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
08/04/2020 16:36	Perfluorooctanoic acid (PFOA)		0.0068		ug/L	0.0020
		202007300295	<u>IX-8M-20200730</u>			
08/04/2020 16:46	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
08/04/2020 16:46	Perfluorooctanoic acid (PFOA)		0.0042		ug/L	0.0020
		202007300296	<u>MB-INF-20200730</u>			
07/31/2020 20:50	Alkalinity in CaCO3 units		170		mg/L	2.0
08/05/2020 18:08	Arsenic Total ICAP/MS		1.6	10	ug/L	1.0
07/31/2020 13:41	Calcium Total ICAP		65		mg/L	1.0
07/30/2020 20:56	Chloride		52	250	mg/L	2.5
08/01/2020 17:20	Heterotrophic Plate Count		790		CFU/ml	1.0
08/10/2020 15:34	Hexavalent chromium(Dissolved)		0.41		ug/L	0.020
07/31/2020 13:41	Magnesium Total ICAP		13		mg/L	0.10
07/30/2020 20:56	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
07/30/2020 20:56	Nitrate as NO3 (calc)		10	45	mg/L	2.2
08/05/2020 14:53	Oil and Grease by 1664(subbed)		2.38		mg/L	0.95
08/04/2020 16:55	Perfluorobutanesulfonic acid (PFBS)		0.0084		ug/L	0.0020
08/04/2020 16:55	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
08/04/2020 16:55	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
08/04/2020 16:55	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
08/04/2020 16:55	Perfluorononanoic acid (PFNA)		0.0037		ug/L	0.0020
08/04/2020 16:55	Perfluorooctanesulfonic acid (PFOS)		0.035		ug/L	0.0020
08/04/2020 16:55	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
07/31/2020 13:41	Potassium Total ICAP		4.0		mg/L	1.0
07/31/2020 13:41	Sodium Total ICAP		54		mg/L	1.0
07/30/2020 20:56	Sulfate		79	250	mg/L	2.5
08/05/2020 23:12	Total Dissolved Solids (TDS)		390	500	mg/L	10
07/31/2020 15:58	Total Hardness as CaCO3 by ICP (calc)		220		mg/L	3.0
07/30/2020 20:56	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
08/05/2020 21:33	Total Organic Carbon		0.77		mg/L	0.30
08/04/2020 14:53	Uranium by ICPMS as pCi/L		1.6		pCi/L	0.70
07/31/2020 23:39	Uranium ICAP/MS		2.5	30	ug/L	1.0
		202007300298	<u>LH-EFF-20200730</u>			
08/01/2020 17:20	Heterotrophic Plate Count		3700		CFU/ml	1.0
		202007300299	<u>MB-EFF-20200730</u>			

SUMMARY OF POSITIVE DATA ONLY

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Report: 884399
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Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Samples Received on:
07/30/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/01/2020 17:20	Heterotrophic Plate Count		910		CFU/ml	1.0

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Water Replenishment District
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 4040 Paramount Blvd.
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Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1M-20200730 (202007300278)					Sampled on 07/30/2020 1003				
EPA 537.1 - EPA Method 537.1									
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	13C2-PFDA	81	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	13C2-PFHxA	90	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	80	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	102	%		1
07/31/20	08/03/20 23:06	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	92	%		1

GAC-2M-20200730 (202007300279)					Sampled on 07/30/2020 1006				
EPA 537.1 - EPA Method 537.1									
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	13C2-PFDA	84	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	13C2-PFHxA	94	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	84	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	101	%		1
07/31/20	08/03/20 23:25	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	94	%		1

GAC-3M-20200730 (202007300280)

Sampled on 07/30/2020 1009

EPA 537.1 - EPA Method 537.1

07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 884399
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 Group: WRD Pilot [Set #1]

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 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	13C2-PFDA	85	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	13C2-PFHxA	95	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	84	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	103	%		1
07/31/20	08/03/20 23:34	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	93	%		1

GAC-4M-20200730 (202007300281)

Sampled on 07/30/2020 1012

EPA 537.1 - EPA Method 537.1

07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
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Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	13C2-PFDA	86	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	13C2-PFHxA	96	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	86	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	102	%		1
07/31/20	08/03/20 23:44	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	92	%		1

IX-1M-20200730 (202007300282)

Sampled on 07/30/2020 1015

EPA 537.1 - EPA Method 537.1

07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0044	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	13C2-PFDA	88	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	13C2-PFHxA	92	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	83	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/31/20	08/03/20 23:53	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	96	%		1

IX-2M-20200730 (202007300283)

Sampled on 07/30/2020 1018

EPA 537.1 - EPA Method 537.1

07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0026	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	13C2-PFDA	89	%		1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	13C2-PFHxA	90	%		1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	82	%		1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	105	%		1

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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/04/20 00:03	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	92	%		1
					Sampled on 07/30/2020 1021				
EPA 537.1 - EPA Method 537.1									
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	13C2-PFDA	88	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	13C2-PFHxA	93	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	83	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	102	%		1
07/31/20	08/04/20 00:13	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	98	%		1

IX-4M-20200730 (202007300285)

Sampled on 07/30/2020 1024

EPA 537.1 - EPA Method 537.1

07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0023	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	13C2-PFDA	84	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	13C2-PFHxA	87	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	79	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	103	%		1
07/31/20	08/04/20 00:22	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	93	%		1

LH-INF-20200730 (202007300286)

Sampled on 07/30/2020 1027

EPA 200.8 - ICPMS Metals

07/31/20	08/05/20 18:06	1265201	1266161	(EPA 200.8)	Arsenic Total ICAP/MS	3.3	ug/L	1.0	1
07/31/20	07/31/20 23:36	1265201	1265433	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
07/31/20	07/31/20 23:36	1265201	1265433	(EPA 200.8)	Uranium ICAP/MS	5.6	ug/L	1.0	1

EPA 200.7 - ICP Metals

07/31/20	07/31/20 13:40	1265201	1265297	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
07/31/20	07/31/20 13:40	1265201	1265297	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
07/31/20	07/31/20 13:40	1265201	1265297	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
07/31/20	07/31/20 13:40	1265201	1265297	(EPA 200.7)	Potassium Total ICAP	4.7	mg/L	1.0	1
07/31/20	07/31/20 13:40	1265201	1265297	(EPA 200.7)	Sodium Total ICAP	71	mg/L	1.0	1

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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
SM 9215B - Heterotrophic Plate Count									
07/30/20	08/01/20 17:20	1265277	1265484	(SM 9215B)	Heterotrophic Plate Count	4100	CFU/ml	1.0	1
SM 9223B - Quantitray Coliforms 18 Hour									
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria	<1	MPN/100 mL	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria	<1	MPN/100 mL	1.0	1
SM 5310C - Total Organic Carbon									
08/05/20 21:16			1266174	(SM 5310C)	Total Organic Carbon	0.64	mg/L	0.30	1
EPA 200.8 - Uranium by ICPMS as pCi/L									
08/04/20 14:53				(EPA 200.8)	Uranium by ICPMS as pCi/L	3.8 (c)	pCi/L	0.70	1
SM 2340B - Total Hardness as CaCO3 by ICP									
07/31/20 15:58				(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
08/10/20 15:04			1267424	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.67	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
07/30/20 20:43			1264850	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
07/30/20 20:43			1264850	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
07/30/20 20:43			1264850	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
07/30/20 20:43			1264850	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
07/30/20 20:43			1265140	(EPA 300.0)	Chloride	110	mg/L	2.5	5
07/30/20 20:43			1265140	(EPA 300.0)	Sulfate	180	mg/L	2.5	5
EPA 314.0 - Perchlorate									
08/05/20 15:21		(1)	1266293	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0061	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	13C2-PFDA	87	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	13C2-PFHxA	88	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	81	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	105	%		1
07/31/20	08/04/20 00:32	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	92	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	08/05/20 14:53			(EPA 1664)	Oil and Grease by 1664(subbed)	2.38	mg/L	0.95	1
EPA 524.2 - Volatile Organics by GCMS									
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LK,R2,LM)	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1

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Water Replenishment District
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 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	2,2-Dichloropropane	ND (LK)	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Chloroform (Trichloromethane)	0.54	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Naphthalene	ND (LK,R2,LM)	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1

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Water Replenishment District
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 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	tert-amyl Methyl Ether	ND (LK)	ug/L	3.0	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Total THM	0.54	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	1,2-Dichloroethane-d4	99	%		1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	4-Bromofluorobenzene	99	%		1
08/05/20	08/05/20 19:48	1266298	1266299	(EPA 524.2)	Toluene-d8	98	%		1
SM 2320B - Alkalinity in CaCO3 units									
	07/31/20 21:17		1265366	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
08/05/20	08/05/20 23:11	1266285	1266286	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	650	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	08/04/20 22:21		1265927	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<u>LH-INF-DUP-20200730 (202007300287)</u>									
EPA 537.1 - EPA Method 537.1									
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Sampled on 07/30/2020 1030

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Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0058	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0059	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0032	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	13C2-PFDA	88	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	13C2-PFHxA	87	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	78	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	108	%		1
07/31/20	08/03/20 21:20	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	93	%		1

GAC-5M-20200730 (202007300288)

Sampled on 07/30/2020 1203

EPA 537.1 - EPA Method 537.1

07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0035	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0027	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0035	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	13C2-PFDA	85	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	13C2-PFHxA	83	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	71	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/31/20	08/04/20 00:41	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-6M-20200730 (202007300289)

Sampled on 07/30/2020 1206

EPA 537.1 - EPA Method 537.1

07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0065	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	13C2-PFDA	86	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	13C2-PFHxA	92	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	82	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	106	%		1
07/31/20	08/03/20 21:39	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	92	%		1

GAC-7M-20200730 (202007300290)

Sampled on 07/30/2020 1209

EPA 537.1 - EPA Method 537.1

07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0052	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0022	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	13C2-PFDA	85	%		1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	13C2-PFHxA	94	%		1

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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	13C3-HFPO-DA	85	%		1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	d3-NMeFOSAA	104	%		1
07/31/20	08/04/20 00:51	1265209	1265756	(EPA 537.1)	d5-NEtFOSAA	95	%		1

GAC-8M-20200730 (202007300291)

Sampled on 07/30/2020 1212

EPA 537.1 - EPA Method 537.1

08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0028	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0024	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	13C2-PFDA	89	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	13C2-PFHxA	94	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	85	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/03/20	08/04/20 15:58	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	97	%		1

IX-5M-20200730 (202007300292)

Sampled on 07/30/2020 1215

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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0042	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	13C2-PFDA	98	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	13C2-PFHxA	90	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	124	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	86	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	114	%		1
08/03/20	08/04/20 16:08	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	95	%		1

IX-6M-20200730 (202007300293)

Sampled on 07/30/2020 1218

EPA 537.1 - EPA Method 537.1									
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0050	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	13C2-PFDA	97	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	13C2-PFHxA	94	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	86	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	114	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	112	%		1
08/03/20	08/04/20 16:17	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	99	%		1

IX-7M-20200730 (202007300294)

Sampled on 07/30/2020 1221

EPA 537.1 - EPA Method 537.1

08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 884399
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 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0068	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	13C2-PFDA	98	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	13C2-PFHxA	89	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	84	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	110	%		1
08/03/20	08/04/20 16:36	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	101	%		1

IX-8M-20200730 (202007300295)

Sampled on 07/30/2020 1224

EPA 537.1 - EPA Method 537.1

08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0042	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	13C2-PFDA	94	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	13C2-PFHxA	90	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	125	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	84	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	109	%		1
08/03/20	08/04/20 16:46	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	101	%		1

MB-INF-20200730 (202007300296)

Sampled on 07/30/2020 1227

EPA 200.8 - ICPMS Metals

07/31/20	08/05/20 18:08	1265201	1266161	(EPA 200.8)	Arsenic Total ICAP/MS	1.6	ug/L	1.0	1
07/31/20	07/31/20 23:39	1265201	1265433	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
07/31/20	07/31/20 23:39	1265201	1265433	(EPA 200.8)	Uranium ICAP/MS	2.5	ug/L	1.0	1

EPA 200.7 - ICP Metals

07/31/20	07/31/20 13:41	1265201	1265297	(EPA 200.7)	Calcium Total ICAP	65	mg/L	1.0	1
07/31/20	07/31/20 13:41	1265201	1265297	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
07/31/20	07/31/20 13:41	1265201	1265297	(EPA 200.7)	Magnesium Total ICAP	13	mg/L	0.10	1
07/31/20	07/31/20 13:41	1265201	1265297	(EPA 200.7)	Potassium Total ICAP	4.0	mg/L	1.0	1
07/31/20	07/31/20 13:41	1265201	1265297	(EPA 200.7)	Sodium Total ICAP	54	mg/L	1.0	1

SM 9215B - Heterotrophic Plate Count

07/30/20	08/01/20 17:20	1265277	1265484	(SM 9215B)	Heterotrophic Plate Count	790	CFU/ml	1.0	1
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SM 9223B - Quantitray Coliforms 18 Hour

07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria	<1	MPN/100 mL	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria	<1	MPN/100 mL	1.0	1

SM 5310C - Total Organic Carbon

	08/05/20 21:33		1266174	(SM 5310C)	Total Organic Carbon	0.77	mg/L	0.30	1
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Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 200.8 - Uranium by ICPMS as pCi/L									
	08/04/20 14:53			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.6 (c)	pCi/L	0.70	1
SM 2340B - Total Hardness as CaCO3 by ICP									
	07/31/20 15:58			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	220 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
	08/10/20 15:34		1267424	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.41	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	07/30/20 20:56		1264850	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
	07/30/20 20:56		1264850	(EPA 300.0)	Nitrate as NO3 (calc)	10	mg/L	2.2	5
	07/30/20 20:56		1264850	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	07/30/20 20:56		1264850	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	07/30/20 20:56		1265140	(EPA 300.0)	Chloride	52	mg/L	2.5	5
	07/30/20 20:56		1265140	(EPA 300.0)	Sulfate	79	mg/L	2.5	5
EPA 314.0 - Perchlorate									
	08/05/20 15:46		(1) 1266293	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0084	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0037	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.035	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	13C2-PFDA	96	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	13C2-PFHxA	88	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	13C2-PFOA- IS#1	129	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	13C3-HFPO-DA	81	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	13C4-PFOS- IS#2	115	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	d3-NMeFOSAA	117	%		1
08/03/20	08/04/20 16:55	1265602	1265992	(EPA 537.1)	d5-NEtFOSAA	98	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	08/05/20 14:53			(EPA 1664)	Oil and Grease by 1664(subbed)	2.38	mg/L	0.95	1
EPA 524.2 - Volatile Organics by GCMS									
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LK,R2,LM)	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	2,2-Dichloropropane	ND (LK)	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1

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 1 800 566 LABS (1 800 566 5227)

Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Naphthalene	ND (LK,R2,LM)	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	tert-amyl Methyl Ether	ND (LK)	ug/L	3.0	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1

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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	1,2-Dichloroethane-d4	102	%		1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	4-Bromofluorobenzene	96	%		1
08/05/20	08/05/20 20:12	1266298	1266299	(EPA 524.2)	Toluene-d8	98	%		1
SM 2320B - Alkalinity in CaCO3 units									
	07/31/20 20:50		1265366	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
08/05/20	08/05/20 23:12	1266285	1266286	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	390	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	08/04/20 22:22		1265927	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
FB-20200730 (202007300297)						Sampled on 07/30/2020 1230			
EPA 537.1 - EPA Method 537.1									
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1

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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
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 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 07/30/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	13C2-PFDA	100	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	13C2-PFHxA	105	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	13C3-HFPO-DA	100	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/05/20	08/05/20 21:06	1265933	1266344	(EPA 537.1)	d5-NEtFOSAA	95	%		1

LH-EFF-20200730 (202007300298)

Sampled on 07/30/2020 1033

SM 9215B - Heterotrophic Plate Count

07/30/20	08/01/20 17:20	1265277	1265484	(SM 9215B)	Heterotrophic Plate Count	3700	CFU/ml	1.0	1
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SM 9223B - Quantitray Coliforms 18 Hour

07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria	<1	MPN/100 mL	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria	<1	MPN/100 mL	1.0	1

MB-EFF-20200730 (202007300299)

Sampled on 07/30/2020 1233

SM 9215B - Heterotrophic Plate Count

07/30/20	08/01/20 17:20	1265277	1265484	(SM 9215B)	Heterotrophic Plate Count	910	CFU/ml	1.0	1
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SM 9223B - Quantitray Coliforms 18 Hour

07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour E. Coli Confirmed (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Large Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	18 Hour Total Coliform Confm (Small Wells)	ND	PW	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria (P/A)	A	PA		1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	E. Coli Bacteria	<1	MPN/100 mL	1.0	1
07/30/20	07/31/20 11:27	1265155	1265278	(SM 9223B)	Total Coliform Bacteria	<1	MPN/100 mL	1.0	1

Rounding on totals after summation.

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Report: 884399
Project: 0250000
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Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1264850

202007300286 LH-INF-20200730
 202007300296 MB-INF-20200730

Analysis Date: 07/30/2020

Analyzed by: B9PD
 Analyzed by: B9PD

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1265140

202007300286 LH-INF-20200730
 202007300296 MB-INF-20200730

Analysis Date: 07/30/2020

Analyzed by: B9PD
 Analyzed by: B9PD

Quantitray Coliforms 18 Hour

Prep Batch: 1265155 Analytical Batch: 1265278

202007300286 LH-INF-20200730
 202007300296 MB-INF-20200730
 202007300298 LH-EFF-20200730
 202007300299 MB-EFF-20200730

Analysis Date: 07/31/2020

Analyzed by: XBL3
 Analyzed by: XBL3
 Analyzed by: XBL3
 Analyzed by: XBL3

ICP Metals

Prep Batch: 1265201 Analytical Batch: 1265297

202007300286 LH-INF-20200730
 202007300296 MB-INF-20200730

Analysis Date: 07/31/2020

Analyzed by: Y7TT
 Analyzed by: Y7TT

Alkalinity in CaCO3 units

Analytical Batch: 1265366

202007300286 LH-INF-20200730
 202007300296 MB-INF-20200730

Analysis Date: 07/31/2020

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

ICPMS Metals

Prep Batch: 1265201 Analytical Batch: 1265433

202007300286 LH-INF-20200730
 202007300296 MB-INF-20200730

Analysis Date: 07/31/2020

Analyzed by: AZS
 Analyzed by: AZS

Heterotrophic Plate Count

Prep Batch: 1265277 Analytical Batch: 1265484

202007300286 LH-INF-20200730
 202007300296 MB-INF-20200730
 202007300298 LH-EFF-20200730
 202007300299 MB-EFF-20200730

Analysis Date: 08/01/2020

Analyzed by: HUQ2
 Analyzed by: HUQ2
 Analyzed by: HUQ2
 Analyzed by: HUQ2

EPA Method 537.1

Prep Batch: 1265209 Analytical Batch: 1265756

202007300278 GAC-1M-20200730
 202007300279 GAC-2M-20200730
 202007300280 GAC-3M-20200730
 202007300281 GAC-4M-20200730
 202007300282 IX-1M-20200730
 202007300283 IX-2M-20200730
 202007300284 IX-3M-20200730
 202007300285 IX-4M-20200730

Analysis Date: 08/03/2020

Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
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 Analyzed by: Y7BM
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Report: 884399
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

202007300286	LH-INF-20200730	Analyzed by: Y7BM
202007300287	LH-INF-DUP-20200730	Analyzed by: Y7BM
202007300288	GAC-5M-20200730	Analyzed by: Y7BM
202007300289	GAC-6M-20200730	Analyzed by: Y7BM
202007300290	GAC-7M-20200730	Analyzed by: Y7BM

Total Suspended Solids (TSS)

Analytical Batch: 1265927

Analysis Date: 08/04/2020

202007300286	LH-INF-20200730	Analyzed by: TJ52
202007300296	MB-INF-20200730	Analyzed by: TJ52

EPA Method 537.1

Prep Batch: 1265602 Analytical Batch: 1265992

Analysis Date: 08/04/2020

202007300291	GAC-8M-20200730	Analyzed by: SZZ
202007300292	IX-5M-20200730	Analyzed by: SZZ
202007300293	IX-6M-20200730	Analyzed by: SZZ
202007300294	IX-7M-20200730	Analyzed by: SZZ
202007300295	IX-8M-20200730	Analyzed by: SZZ
202007300296	MB-INF-20200730	Analyzed by: SZZ

ICPMS Metals

Prep Batch: 1265201 Analytical Batch: 1266161

Analysis Date: 08/05/2020

202007300286	LH-INF-20200730	Analyzed by: DHX7
202007300296	MB-INF-20200730	Analyzed by: DHX7

Total Organic Carbon

Analytical Batch: 1266174

Analysis Date: 08/05/2020

202007300286	LH-INF-20200730	Analyzed by: ZB2Z
202007300296	MB-INF-20200730	Analyzed by: ZB2Z

Total Dissolved Solids (TDS)

Prep Batch: 1266285 Analytical Batch: 1266286

Analysis Date: 08/05/2020

202007300286	LH-INF-20200730	Analyzed by: JRF
202007300296	MB-INF-20200730	Analyzed by: JRF

Perchlorate

Analytical Batch: 1266293

Analysis Date: 08/05/2020

202007300286	LH-INF-20200730	Analyzed by: H5VG
202007300296	MB-INF-20200730	Analyzed by: H5VG

Volatile Organics by GCMS

Prep Batch: 1266298 Analytical Batch: 1266299

Analysis Date: 08/05/2020

202007300286	LH-INF-20200730	Analyzed by: FX5E
202007300296	MB-INF-20200730	Analyzed by: FX5E

EPA Method 537.1

Prep Batch: 1265933 Analytical Batch: 1266344

Analysis Date: 08/05/2020

202007300297	FB-20200730	Analyzed by: KAM
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Hexavalent chromium(Dissolved)

Analytical Batch: 1267424

Analysis Date: 08/10/2020

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Report: 884399
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

202007300286
202007300296

LH-INF-20200730
MB-INF-20200730

Analyzed by: TLH
Analyzed by: TLH

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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1264850					Analysis Date: 07/30/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0506	mg/L	101	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0133	mg/L	106	(50-150)		
MS_202007300296	Nitrate as Nitrogen by IC	2.4	6.5	9.01	mg/L	106	(80-120)		
MSD_202007300296	Nitrate as Nitrogen by IC	2.4	6.5	9.08	mg/L	108	(80-120)	20	0.79
LCS1	Nitrite Nitrogen by IC		1	1.00	mg/L	100	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.01	mg/L	101	(90-110)	20	1
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0468	mg/L	94	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.00810	mg/L	65	(50-150)		
MS_202007300296	Nitrite Nitrogen by IC	ND	2.5	2.53	mg/L	101	(80-120)		
MSD_202007300296	Nitrite Nitrogen by IC	ND	2.5	2.55	mg/L	102	(80-120)	20	0.89
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1265140					Analysis Date: 07/30/2020				
LCS1	Chloride		25	26.6	mg/L	106	(90-110)		
LCS2	Chloride		25	26.6	mg/L	106	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.510	mg/L	102	(50-150)		
MS_202007300296	Chloride	52	65	124	mg/L	114	(80-120)		
MS_202007300430	Chloride	ND	325	342	mg/L	108	(80-120)		
MSD_202007300296	Chloride	52	65	125	mg/L	116	(80-120)	20	1.0
MSD_202007300430	Chloride	ND	325	344	mg/L	109	(80-120)	20	0.47
LCS1	Sulfate		50	52.4	mg/L	105	(90-110)		
LCS2	Sulfate		50	52.3	mg/L	105	(90-110)	20	0.19
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.01	mg/L	101	(50-150)		
MRL_W	Sulfate		0.25	0.240	mg/L	96	(50-150)		
MS_202007300296	Sulfate	79	125	217	mg/L	110	(80-120)		
MS_202007300430	Sulfate	ND	625	691	mg/L	109	(80-120)		
MSD_202007300296	Sulfate	79	125	219	mg/L	111	(80-120)	20	0.94
MSD_202007300430	Sulfate	ND	625	694	mg/L	109	(80-120)	20	0.39

Spike recovery is already corrected for native results.
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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
ICP Metals by EPA 200.7									
Analytical Batch: 1265297					Analysis Date: 07/31/2020				
LCS1	Calcium Total ICAP		50	50.5	mg/L	101	(85-115)		
LCS2	Calcium Total ICAP		50	51.0	mg/L	102	(85-115)	20	0.99
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.01	mg/L	101	(50-150)		
MS_202007300210	Calcium Total ICAP	100	50	145	mg/L	86	(70-130)		
MS2_202007300016	Calcium Total ICAP	48	50	95.0	mg/L	95	(70-130)		
MSD_202007300210	Calcium Total ICAP	100	50	146	mg/L	87	(70-130)	20	0.73
MSD2_202007300016	Calcium Total ICAP	48	50	95.4	mg/L	95	(70-130)	20	0.39
LCS1	Iron Total ICAP		5	5.06	mg/L	101	(85-115)		
LCS2	Iron Total ICAP		5	5.09	mg/L	102	(85-115)	20	0.59
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0205	mg/L	103	(50-150)		
MS_202007300210	Iron Total ICAP	ND	5	5.10	mg/L	102	(70-130)		
MS2_202007300016	Iron Total ICAP	ND	5	5.07	mg/L	101	(70-130)		
MSD_202007300210	Iron Total ICAP	ND	5	5.12	mg/L	102	(70-130)	20	0.39
MSD2_202007300016	Iron Total ICAP	ND	5	5.10	mg/L	102	(70-130)	20	0.51
LCS1	Magnesium Total ICAP		20	19.8	mg/L	99	(85-115)		
LCS2	Magnesium Total ICAP		20	20.0	mg/L	100	(85-115)	20	0.50
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0951	mg/L	95	(50-150)		
MS_202007300210	Magnesium Total ICAP	28	20	46.5	mg/L	93	(70-130)		
MS2_202007300016	Magnesium Total ICAP	42	20	60.7	mg/L	92	(70-130)		
MSD_202007300210	Magnesium Total ICAP	28	20	46.8	mg/L	94	(70-130)	20	0.59
MSD2_202007300016	Magnesium Total ICAP	42	20	60.9	mg/L	93	(70-130)	20	0.38
LCS1	Potassium Total ICAP		20	20.0	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	20.2	mg/L	101	(85-115)	20	1
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.696	mg/L	70	(50-150)		
MS_202007300210	Potassium Total ICAP	4.2	20	25.7	mg/L	107	(70-130)		
MS2_202007300016	Potassium Total ICAP	2.8	20	24.4	mg/L	108	(70-130)		
MSD_202007300210	Potassium Total ICAP	4.2	20	25.8	mg/L	108	(70-130)	20	0.41
MSD2_202007300016	Potassium Total ICAP	2.8	20	24.6	mg/L	109	(70-130)	20	0.69
LCS1	Sodium Total ICAP		50	50.6	mg/L	101	(85-115)		
LCS2	Sodium Total ICAP		50	51.2	mg/L	102	(85-115)	20	1.2
MBLK	Sodium Total ICAP			<0.5	mg/L				

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 884399
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Sodium Total ICAP		1	1.10	mg/L	110	(50-150)		
MS_202007300210	Sodium Total ICAP	55	50	99.5	mg/L	89	(70-130)		
MS2_202007300016	Sodium Total ICAP	53	50	99.1	mg/L	91	(70-130)		
MSD_202007300210	Sodium Total ICAP	55	50	100	mg/L	91	(70-130)	20	0.50
MSD2_202007300016	Sodium Total ICAP	53	50	99.4	mg/L	92	(70-130)	20	0.28

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1265366

Analysis Date: 07/31/2020

LCS1	Alkalinity in CaCO3 units		100	98.5	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.4	mg/L	98	(90-110)	20	0.10
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.88	mg/L	94	(50-150)		
MS_202007300052	Alkalinity in CaCO3 units	5.0	100	111	mg/L	106	(80-120)		
MS_202007300151	Alkalinity in CaCO3 units	70	100	170	mg/L	99	(80-120)		
MSD_202007300052	Alkalinity in CaCO3 units	5.0	100	111	mg/L	106	(80-120)	20	0.17
MSD_202007300151	Alkalinity in CaCO3 units	70	100	170	mg/L	100	(80-120)	20	0.27

ICPMS Metals by EPA 200.8

Analytical Batch: 1265433

Analysis Date: 07/31/2020

LCS1	Arsenic Total ICAP/MS		50	48.7	ug/L	97	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	47.1	ug/L	94	(85-115)	20	3.3
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.30	ug/L	130	(50-150)		
MS_202007290620	Arsenic Total ICAP/MS	3.4	50	50.3	ug/L	94	(70-130)		
MS2_202007300417	Arsenic Total ICAP/MS	ND	50	46.9	ug/L	93	(70-130)		
MSD_202007290620	Arsenic Total ICAP/MS	3.4	50	52.2	ug/L	98	(70-130)	20	3.6
MSD2_202007300417	Arsenic Total ICAP/MS	ND	50	52.8	ug/L	105	(70-130)	20	12
LCS1	Manganese Total ICAP/MS		100	100	ug/L	100	(85-115)		
LCS2	Manganese Total ICAP/MS		100	95.3	ug/L	95	(85-115)	20	4.8
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	1.96	ug/L	98	(50-150)		
MS_202007290620	Manganese Total ICAP/MS	ND	100	95.2	ug/L	95	(70-130)		
MS2_202007300417	Manganese Total ICAP/MS	ND	100	93.7	ug/L	93	(70-130)		
MSD_202007290620	Manganese Total ICAP/MS	ND	100	98.8	ug/L	98	(70-130)	20	3.8
MSD2_202007300417	Manganese Total ICAP/MS	ND	100	106	ug/L	106	(70-130)	20	12
LCS1	Uranium ICAP/MS		50	51.2	ug/L	102	(85-115)		
LCS2	Uranium ICAP/MS		50	48.1	ug/L	96	(85-115)	20	6.2
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.966	ug/L	97	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202007290620	Uranium ICAP/MS	ND	50	49.4	ug/L	99	(70-130)		
MS2_202007300417	Uranium ICAP/MS	ND	50	47.8	ug/L	96	(70-130)		
MSD_202007290620	Uranium ICAP/MS	ND	50	51.0	ug/L	102	(70-130)	20	3.4
MSD2_202007300417	Uranium ICAP/MS	ND	50	54.6	ug/L	109	(70-130)	20	13

EPA Method 537.1 by EPA 537.1

Prep Batch: 1265209 Analytical Batch: 1265756

Analysis Date: 08/03/2020

DUP_202007300289	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0437	ug/L	93	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0445	ug/L	94	(70-130)	30	1.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00176	ug/L	93	(50-150)		
MS2_202007300287	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0407	ug/L	86	(70-130)		
DUP_202007300289	13C2-PFDA (S)			85.7	%	86	(70-130)		
LCS3	13C2-PFDA (S)		100	90.0	%	90	(70-130)		
LCS4	13C2-PFDA (S)		100	90.0	%	90	(70-130)		
MBLK	13C2-PFDA (S)			91.3	%	91	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	88.4	%	88	(70-130)		
MS2_202007300287	13C2-PFDA (S)		100	90.3	%	90	(70-130)		
DUP_202007300289	13C2-PFHxA (S)			90.4	%	90	(70-130)		
LCS3	13C2-PFHxA (S)		100	96.5	%	96	(70-130)		
LCS4	13C2-PFHxA (S)		100	94.8	%	95	(70-130)		
MBLK	13C2-PFHxA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	95.7	%	96	(70-130)		
MS2_202007300287	13C2-PFHxA (S)		100	88.7	%	89	(70-130)		
DUP_202007300289	13C2-PFOA- IS#1 (I)			114	%	115	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			114	%	114	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
MS2_202007300287	13C2-PFOA- IS#1 (I)		100	118	%	118	(50-150)		
DUP_202007300289	13C3-HFPO-DA (S)			81.0	%	81	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	87.9	%	88	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	87.0	%	87	(70-130)		
MBLK	13C3-HFPO-DA (S)			90.8	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	87.4	%	87	(70-130)		
MS2_202007300287	13C3-HFPO-DA (S)		100	80.0	%	80	(70-130)		
DUP_202007300289	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MS2_202007300287	13C4-PFOS- IS#2 (I)		100	106	%	107	(50-150)		
DUP_202007300289	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0451	ug/L	93	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0443	ug/L	91	(70-130)	30	1.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00184	ug/L	98	(50-150)		
MS2_202007300287	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0432	ug/L	89	(70-130)		
DUP_202007300289	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0431	ug/L	93	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0436	ug/L	94	(70-130)	30	1.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00175	ug/L	94	(50-150)		
MS2_202007300287	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0420	ug/L	90	(70-130)		
DUP_202007300289	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MBLK	d3-NMeFOSAA (I)			102	%	102	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MS2_202007300287	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
DUP_202007300289	d5-NEtFOSAA (S)			92.4	%	92	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	93.4	%	93	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	95.5	%	96	(70-130)		
MBLK	d5-NEtFOSAA (S)			98.6	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.6	%	95	(70-130)		
MS2_202007300287	d5-NEtFOSAA (S)		100	88.4	%	88	(70-130)		
DUP_202007300289	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0447	ug/L	90	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0435	ug/L	87	(70-130)	30	2.7
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00175	ug/L	88	(50-150)		
MS2_202007300287	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0420	ug/L	84	(70-130)		
DUP_202007300289	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0492	ug/L	99	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0499	ug/L	100	(70-130)	30	1.2

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00210	ug/L	105	(50-150)		
MS2_202007300287	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0479	ug/L	96	(70-130)		
DUP_202007300289	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0500	ug/L	100	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0508	ug/L	102	(70-130)	30	1.8
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	104	(50-150)		
MS2_202007300287	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0503	ug/L	101	(70-130)		
DUP_202007300289	Perfluorobutanesulfonic acid (PFBS)	0.0065		0.00639	ug/L		(0-30)	30	1.3
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0441	ug/L	100	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0433	ug/L	98	(70-130)	30	1.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00181	ug/L	102	(50-150)		
MS2_202007300287	Perfluorobutanesulfonic acid (PFBS)	0.0058	0.044	0.0463	ug/L	92	(70-130)		
DUP_202007300289	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0452	ug/L	91	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0455	ug/L	91	(70-130)	30	0.44
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00182	ug/L	91	(50-150)		
MS2_202007300287	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0473	ug/L	93	(70-130)		
DUP_202007300289	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0434	ug/L	87	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0424	ug/L	85	(70-130)	30	2.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00167	ug/L	83	(50-150)		
MS2_202007300287	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0412	ug/L	82	(70-130)		
DUP_202007300289	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0499	ug/L	100	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0512	ug/L	102	(70-130)	30	2.6
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00223	ug/L	112	(50-150)		
MS2_202007300287	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0522	ug/L	101	(70-130)		
DUP_202007300289	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0467	ug/L	102	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0474	ug/L	104	(70-130)	30	1.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00189	ug/L	104	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007300287	Perfluorohexanesulfonic acid (PFHxS)	0.0059	0.046	0.0514	ug/L	100	(70-130)		
DUP_202007300289	Perfluorohexanoic acid (PFHxA)	0.0036		0.00366	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0520	ug/L	104	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0500	ug/L	100	(70-130)	30	3.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00209	ug/L	104	(50-150)		
MS2_202007300287	Perfluorohexanoic acid (PFHxA)	0.0030	0.05	0.0490	ug/L	92	(70-130)		
DUP_202007300289	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0479	ug/L	96	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0481	ug/L	96	(70-130)	30	0.42
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00198	ug/L	99	(50-150)		
MS2_202007300287	Perfluorononanoic acid (PFNA)	0.0032	0.05	0.0614	ug/L	116	(70-130)		
DUP_202007300289	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0486	ug/L	105	(70-130)	30	1.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00202	ug/L	109	(50-150)		
MS2_202007300287	Perfluorooctanesulfonic acid (PFOS)	0.030	0.046	0.0793	ug/L	107	(70-130)		
DUP_202007300289	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0498	ug/L	100	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0506	ug/L	101	(70-130)	30	1.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00224	ug/L	112	(50-150)		
MS2_202007300287	Perfluorooctanoic acid (PFOA)	0.012	0.05	0.0617	ug/L	100	(70-130)		
DUP_202007300289	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0526	ug/L	105	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0533	ug/L	107	(70-130)	30	1.3
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202007300287	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0520	ug/L	104	(70-130)		
DUP_202007300289	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0427	ug/L	86	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0429	ug/L	86	(70-130)	30	0.47
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00172	ug/L	86	(50-150)		
MS2_202007300287	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0415	ug/L	83	(70-130)		
DUP_202007300289	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0464	ug/L	93	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0464	ug/L	93	(70-130)	30	0.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00190	ug/L	95	(50-150)		
MS2_202007300287	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0460	ug/L	92	(70-130)		

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1265927

Analysis Date: 08/04/2020

DUP_202006240063	Total Suspended Solids (TSS)	140		126	mg/L		(0-10)	10	9.1
DUP_202006240075	Total Suspended Solids (TSS)	72		78.0	mg/L		(0-10)	10	8.0
LCS1	Total Suspended Solids (TSS)		175	170	mg/L	97	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	172	mg/L	98	(71-107)	20	1.2
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	11.0	mg/L	110	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1265602 Analytical Batch: 1265992

Analysis Date: 08/04/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0229	ug/L	97	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0245	ug/L	104	(70-130)	30	6.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00182	ug/L	97	(50-150)		
MS1_202007290444	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0231	ug/L	98	(70-130)		
MSD1_202007290444	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0225	ug/L	96	(70-130)	30	2.8
LCS1	13C2-PFDA (S)		100	95.6	%	96	(70-130)		
LCS2	13C2-PFDA (S)		100	92.2	%	92	(70-130)		
MBLK	13C2-PFDA (S)			98.6	%	99	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	107	%	107	(70-130)		
MS1_202007290444	13C2-PFDA (S)		100	86.3	%	86	(70-130)		
MSD1_202007290444	13C2-PFDA (S)		100	92.3	%	92	(70-130)		
LCS1	13C2-PFHxA (S)		100	98.1	%	98	(70-130)		
LCS2	13C2-PFHxA (S)		100	96.6	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			96.8	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MS1_202007290444	13C2-PFHxA (S)		100	90.8	%	91	(70-130)		
MSD1_202007290444	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	117	%	117	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			119	%	119	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202007290444	13C2-PFOA- IS#1 (I)		100	118	%	118	(50-150)		
MSD1_202007290444	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	88.9	%	89	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	87.8	%	88	(70-130)		
MBLK	13C3-HFPO-DA (S)			90.4	%	90	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.4	%	94	(70-130)		
MS1_202007290444	13C3-HFPO-DA (S)		100	84.3	%	84	(70-130)		
MSD1_202007290444	13C3-HFPO-DA (S)		100	92.0	%	92	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			108	%	109	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
MS1_202007290444	13C4-PFOS- IS#2 (I)		100	108	%	108	(50-150)		
MSD1_202007290444	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0248	ug/L	105	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0252	ug/L	107	(70-130)	30	1.6
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00205	ug/L	109	(50-150)		
MS1_202007290444	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0242	ug/L	102	(70-130)		
MSD1_202007290444	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0247	ug/L	105	(70-130)	30	2.1
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0243	ug/L	104	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0246	ug/L	106	(70-130)	30	1.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00192	ug/L	103	(50-150)		
MS1_202007290444	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0231	ug/L	99	(70-130)		
MSD1_202007290444	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0226	ug/L	97	(70-130)	30	2.0
LCS1	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			113	%	113	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MS1_202007290444	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MSD1_202007290444	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	94.2	%	94	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.7	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			93.4	%	93	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	97.1	%	97	(70-130)		
MS1_202007290444	d5-NEtFOSAA (S)		100	88.9	%	89	(70-130)		
MSD1_202007290444	d5-NEtFOSAA (S)		100	94.2	%	94	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0230	ug/L	92	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0236	ug/L	94	(70-130)	30	2.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00187	ug/L	93	(50-150)		
MS1_202007290444	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0225	ug/L	90	(70-130)		
MSD1_202007290444	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0236	ug/L	94	(70-130)	30	4.7
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0258	ug/L	103	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0266	ug/L	107	(70-130)	30	3.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS1_202007290444	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0257	ug/L	103	(70-130)		
MSD1_202007290444	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0250	ug/L	100	(70-130)	30	2.9
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0259	ug/L	103	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0261	ug/L	104	(70-130)	30	0.77
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00216	ug/L	108	(50-150)		
MS1_202007290444	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0247	ug/L	99	(70-130)		
MSD1_202007290444	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0251	ug/L	100	(70-130)	30	1.6
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0214	ug/L	97	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0214	ug/L	97	(70-130)	30	0.47
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00172	ug/L	98	(50-150)		
MS1_202007290444	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0210	ug/L	95	(70-130)		
MSD1_202007290444	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0218	ug/L	98	(70-130)	30	3.8
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0239	ug/L	96	(70-130)	30	7.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202007290444	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0235	ug/L	94	(70-130)		
MSD1_202007290444	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0241	ug/L	96	(70-130)	30	2.3
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0243	ug/L	97	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0242	ug/L	97	(70-130)	30	0.41
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00194	ug/L	97	(50-150)		
MS1_202007290444	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0233	ug/L	93	(70-130)		
MSD1_202007290444	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0235	ug/L	94	(70-130)	30	0.71
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0276	ug/L	111	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0273	ug/L	109	(70-130)	30	1.1

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00225	ug/L	113	(50-150)		
MS1_202007290444	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0265	ug/L	106	(70-130)		
MSD1_202007290444	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0272	ug/L	109	(70-130)	30	2.6
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0249	ug/L	109	(70-130)	30	0.81
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00197	ug/L	108	(50-150)		
MS1_202007290444	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0244	ug/L	107	(70-130)		
MSD1_202007290444	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0239	ug/L	105	(70-130)	30	2.1
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0266	ug/L	106	(70-130)	30	1.1
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00221	ug/L	110	(50-150)		
MS1_202007290444	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0251	ug/L	100	(70-130)		
MSD1_202007290444	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0260	ug/L	103	(70-130)	30	3.6
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0260	ug/L	104	(70-130)	30	1.2
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00209	ug/L	105	(50-150)		
MS1_202007290444	Perfluorononanoic acid (PFNA)	ND	0.025	0.0248	ug/L	99	(70-130)		
MSD1_202007290444	Perfluorononanoic acid (PFNA)	ND	0.025	0.0251	ug/L	100	(70-130)	30	1.1
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0243	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0247	ug/L	107	(70-130)	30	1.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00195	ug/L	105	(50-150)		
MS1_202007290444	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0239	ug/L	103	(70-130)		
MSD1_202007290444	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0238	ug/L	102	(70-130)	30	0.38
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0271	ug/L	109	(70-130)	30	1.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00221	ug/L	110	(50-150)		
MS1_202007290444	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0264	ug/L	105	(70-130)		
MSD1_202007290444	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0268	ug/L	107	(70-130)	30	1.6
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0286	ug/L	114	(70-130)	30	1.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00225	ug/L	113	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202007290444	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0288	ug/L	115	(70-130)		
MSD1_202007290444	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0290	ug/L	116	(70-130)	30	0.80
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0240	ug/L	96	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0241	ug/L	97	(70-130)	30	0.42
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00198	ug/L	99	(50-150)		
MS1_202007290444	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0230	ug/L	92	(70-130)		
MSD1_202007290444	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0234	ug/L	94	(70-130)	30	1.7
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0246	ug/L	98	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0247	ug/L	99	(70-130)	30	0.41
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00202	ug/L	101	(50-150)		
MS1_202007290444	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0242	ug/L	97	(70-130)		
MSD1_202007290444	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0242	ug/L	97	(70-130)	30	0.038

ICPMS Metals by EPA 200.8

Analytical Batch: 1266161

Analysis Date: 08/05/2020

LCS1	Arsenic Total ICAP/MS		50	52.9	ug/L	106	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	50.5	ug/L	101	(85-115)	20	4.6
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.988	ug/L	99	(50-150)		
MS_202008050255	Arsenic Total ICAP/MS	ND	50	51.8	ug/L	104	(70-130)		
MS2_202007290537	Arsenic Total ICAP/MS	ND	50	58.9	ug/L	117	(70-130)		
MSD_202008050255	Arsenic Total ICAP/MS	ND	50	55.4	ug/L	111	(70-130)	20	6.7
MSD2_202007290537	Arsenic Total ICAP/MS	ND	50	59.0	ug/L	117	(70-130)	20	0.23
LCS1	Manganese Total ICAP/MS		100	102	ug/L	102	(85-115)		
LCS2	Manganese Total ICAP/MS		100	97.9	ug/L	98	(85-115)	20	4.1
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.05	ug/L	102	(50-150)		
MS_202008050255	Manganese Total ICAP/MS	ND	100	96.3	ug/L	96	(70-130)		
MS2_202007290537	Manganese Total ICAP/MS	8.9	100	110	ug/L	101	(70-130)		
MSD_202008050255	Manganese Total ICAP/MS	ND	100	100	ug/L	100	(70-130)	20	3.8
MSD2_202007290537	Manganese Total ICAP/MS	8.9	100	111	ug/L	102	(70-130)	20	0.64
LCS1	Uranium ICAP/MS		50	50.5	ug/L	101	(85-115)		
LCS2	Uranium ICAP/MS		50	48.8	ug/L	98	(85-115)	20	3.4
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.979	ug/L	98	(50-150)		
MS_202008050255	Uranium ICAP/MS	ND	50	47.4	ug/L	95	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202007290537	Uranium ICAP/MS	ND	50	53.8	ug/L	108	(70-130)		
MSD_202008050255	Uranium ICAP/MS	ND	50	50.3	ug/L	101	(70-130)	20	6.0
MSD2_202007290537	Uranium ICAP/MS	ND	50	54.1	ug/L	108	(70-130)	20	0.52

Total Organic Carbon by SM 5310C

Analytical Batch: 1266174

Analysis Date: 08/05/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Total Organic Carbon		5	4.64	mg/L	93	(90-110)		
LCS2	Total Organic Carbon		5	4.74	mg/L	95	(90-110)	20	2.1
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.261	mg/L	131	(50-150)		
MS_202007240205	Total Organic Carbon	0.59	4	4.29	mg/L	93	(80-120)		
MS2_202007310470	Total Organic Carbon	1.2	2	3.17	mg/L	96	(80-120)		
MSD_202007240205	Total Organic Carbon	0.59	4	4.32	mg/L	93	(80-120)	20	0.72
MSD2_202007310470	Total Organic Carbon	1.2	2	3.16	mg/L	96	(80-120)	20	0.22

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1266286

Analysis Date: 08/05/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202007300210	Total Dissolved Solid (TDS)	570		574	mg/L		(0-10)	10	1.1
DUP_202007310200	Total Dissolved Solid (TDS)	240		256	mg/L		(0-10)	10	7.3
LCS1	Total Dissolved Solid (TDS)		175	178	mg/L	102	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	702	mg/L	100	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	13.0	mg/L	130	(50-150)		

Perchlorate by EPA 314.0

Analytical Batch: 1266293

Analysis Date: 08/05/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perchlorate		25	25.5	ug/L	102	(85-115)		
LCS2	Perchlorate		25	25.4	ug/L	101	(85-115)	15	0.39
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.99	ug/L	100	(75-125)		
MS_202007290558	Perchlorate	ND	25	22.9	ug/L	92	(80-120)		
MSD_202007290558	Perchlorate	ND	25	22.8	ug/L	91	(80-120)	15	0.43

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1266299

Analysis Date: 08/05/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,1,1,2-Tetrachloroethane		5	5.69	ug/L	114	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.56	ug/L	111	(70-130)	20	2.3
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.670	ug/L	134	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,1,1-Trichloroethane		5	5.20	ug/L	104	(70-130)		
LCS2	1,1,1-Trichloroethane		5	5.35	ug/L	107	(70-130)	20	2.8
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.10	ug/L	102	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.34	ug/L	107	(70-130)	20	4.6
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.380	ug/L	76	(50-150)		
LCS1	1,1,2-Trichloroethane		5	5.04	ug/L	101	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.28	ug/L	106	(70-130)	20	4.7
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.340	ug/L	68	(50-150)		
LCS1	1,1-Dichloroethane		5	4.93	ug/L	99	(70-130)		
LCS2	1,1-Dichloroethane		5	5.19	ug/L	104	(70-130)	20	5.1
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.370	ug/L	74	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.08	ug/L	102	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.23	ug/L	105	(70-130)	20	2.9
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,1-Dichloropropene		5	5.17	ug/L	103	(70-130)		
LCS2	1,1-Dichloropropene		5	5.39	ug/L	108	(70-130)	20	4.2
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.370	ug/L	74	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	8.50	ug/L	<u>170</u>	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	6.07	ug/L	121	(70-130)	20	<u>33</u>
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.830	ug/L	<u>166</u>	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.30	ug/L	106	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.01	ug/L	100	(70-130)	20	5.6
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.410	ug/L	82	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	6.14	ug/L	123	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.77	ug/L	115	(70-130)	20	6.2
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.630	ug/L	126	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.80	ug/L	96	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.11	ug/L	102	(70-130)	20	6.3

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.360	ug/L	72	(50-150)		
LCS1	1,2-Dichloroethane		5	5.39	ug/L	108	(70-130)		
LCS2	1,2-Dichloroethane		5	5.48	ug/L	110	(70-130)	20	1.7
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.430	ug/L	86	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	99.8	%	100	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	96.6	%	97	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			99.0	%	99	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	97.8	%	98	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	98.2	%	98	(70-130)		
LCS1	1,2-Dichloropropane		5	5.01	ug/L	100	(70-130)		
LCS2	1,2-Dichloropropane		5	5.47	ug/L	109	(70-130)	20	8.8
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.390	ug/L	78	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.65	ug/L	93	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.93	ug/L	99	(70-130)	20	5.8
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.320	ug/L	64	(50-150)		
LCS1	1,3-Dichloropropane		5	5.08	ug/L	102	(70-130)		
LCS2	1,3-Dichloropropane		5	5.30	ug/L	106	(70-130)	20	4.2
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.430	ug/L	86	(50-150)		
LCS1	2,2-Dichloropropane		5	6.69	ug/L	134	(70-130)		
LCS2	2,2-Dichloropropane		5	6.48	ug/L	130	(70-130)	20	3.2
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.430	ug/L	86	(50-150)		
LCS1	2-Butanone (MEK)		50	53.0	ug/L	106	(70-130)		
LCS2	2-Butanone (MEK)		50	54.3	ug/L	109	(70-130)	20	2.4
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.19	ug/L	104	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	97.0	%	97	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	96.0	%	96	(70-130)		
MBLK	4-Bromofluorobenzene (S)			93.4	%	93	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	93.4	%	93	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	93.6	%	94	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	55.2	ug/L	110	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	55.6	ug/L	111	(70-130)	20	0.72

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.20	ug/L	84	(50-150)		
LCS1	Benzene		5	5.00	ug/L	100	(70-130)		
LCS2	Benzene		5	5.39	ug/L	108	(70-130)	20	7.5
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Bromobenzene		5	5.09	ug/L	102	(70-130)		
LCS2	Bromobenzene		5	5.16	ug/L	103	(70-130)	20	1.4
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.370	ug/L	74	(50-150)		
LCS1	Bromochloromethane		5	4.91	ug/L	98	(70-130)		
LCS2	Bromochloromethane		5	5.27	ug/L	105	(70-130)	20	7.1
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.360	ug/L	72	(50-150)		
LCS1	Bromodichloromethane		5	5.33	ug/L	107	(70-130)		
LCS2	Bromodichloromethane		5	5.29	ug/L	106	(70-130)	20	0.75
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	Bromoethane		5	4.92	ug/L	98	(70-130)		
LCS2	Bromoethane		5	5.18	ug/L	104	(70-130)	20	5.2
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.400	ug/L	80	(50-150)		
LCS1	Bromoform		5	5.58	ug/L	112	(70-130)		
LCS2	Bromoform		5	5.48	ug/L	110	(70-130)	20	1.8
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.610	ug/L	122	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	4.33	ug/L	87	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	4.58	ug/L	92	(70-130)	20	5.6
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.370	ug/L	74	(50-150)		
LCS1	Carbon disulfide		5	4.81	ug/L	96	(70-130)		
LCS2	Carbon disulfide		5	4.86	ug/L	97	(70-130)	20	1.0
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.340	ug/L	68	(50-150)		
LCS1	Carbon Tetrachloride		5	5.23	ug/L	105	(70-130)		
LCS2	Carbon Tetrachloride		5	5.07	ug/L	101	(70-130)	20	3.1
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.460	ug/L	92	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Chlorobenzene		5	5.10	ug/L	102	(70-130)		
LCS2	Chlorobenzene		5	5.07	ug/L	101	(70-130)	20	0.59
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.380	ug/L	76	(50-150)		
LCS1	Chlorodibromomethane		5	5.40	ug/L	108	(70-130)		
LCS2	Chlorodibromomethane		5	5.53	ug/L	111	(70-130)	20	2.4
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.590	ug/L	118	(50-150)		
LCS1	Chloroethane		5	5.15	ug/L	103	(70-130)		
LCS2	Chloroethane		5	5.06	ug/L	101	(70-130)	20	1.8
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.95	ug/L	99	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.20	ug/L	104	(70-130)	20	4.9
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.400	ug/L	80	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.49	ug/L	90	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.85	ug/L	97	(70-130)	20	7.7
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.460	ug/L	92	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.93	ug/L	99	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	5.20	ug/L	104	(70-130)	20	5.3
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.390	ug/L	78	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	5.92	ug/L	118	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	5.82	ug/L	116	(70-130)	20	1.7
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.590	ug/L	118	(50-150)		
LCS1	Dibromomethane		5	5.05	ug/L	101	(70-130)		
LCS2	Dibromomethane		5	5.09	ug/L	102	(70-130)	20	0.79
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.410	ug/L	82	(50-150)		
LCS1	Dichlorodifluoromethane		5	5.20	ug/L	104	(70-130)		
LCS2	Dichlorodifluoromethane		5	5.30	ug/L	106	(70-130)	20	1.9
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.430	ug/L	86	(50-150)		
LCS1	Dichloromethane		5	4.95	ug/L	99	(70-130)		
LCS2	Dichloromethane		5	5.14	ug/L	103	(70-130)	20	3.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	Di-isopropyl ether		5	4.94	ug/L	99	(70-130)		
LCS2	Di-isopropyl ether		5	5.19	ug/L	104	(70-130)	20	4.9
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.430	ug/L	86	(50-150)		
LCS1	Ethyl benzene		5	4.97	ug/L	99	(70-130)		
LCS2	Ethyl benzene		5	5.20	ug/L	104	(70-130)	20	4.5
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.350	ug/L	70	(50-150)		
LCS1	Hexachlorobutadiene		5	5.70	ug/L	114	(70-130)		
LCS2	Hexachlorobutadiene		5	5.72	ug/L	114	(70-130)	20	0.35
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.570	ug/L	114	(50-150)		
LCS1	Isopropylbenzene		5	5.00	ug/L	100	(70-130)		
LCS2	Isopropylbenzene		5	5.20	ug/L	104	(70-130)	20	3.9
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.360	ug/L	72	(50-150)		
LCS1	m,p-Xylenes		10	10.4	ug/L	104	(70-130)		
LCS2	m,p-Xylenes		10	10.9	ug/L	109	(70-130)	20	4.7
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.700	ug/L	70	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.460	ug/L	92	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	5.04	ug/L	101	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.37	ug/L	107	(70-130)	20	6.3
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.390	ug/L	78	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.51	ug/L	110	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.70	ug/L	114	(70-130)	20	3.4
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.380	ug/L	76	(50-150)		
LCS1	Naphthalene		5	8.62	ug/L	172	(70-130)		
LCS2	Naphthalene		5	5.98	ug/L	120	(70-130)	20	36
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.890	ug/L	178	(50-150)		
LCS1	n-Butylbenzene		5	4.99	ug/L	100	(70-130)		
LCS2	n-Butylbenzene		5	5.27	ug/L	105	(70-130)	20	5.5
MBLK	n-Butylbenzene			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 884399
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 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	n-Butylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	n-Propylbenzene		5	5.15	ug/L	103	(70-130)		
LCS2	n-Propylbenzene		5	5.20	ug/L	104	(70-130)	20	0.97
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.340	ug/L	68	(50-150)		
LCS1	o-Chlorotoluene		5	4.94	ug/L	99	(70-130)		
LCS2	o-Chlorotoluene		5	5.14	ug/L	103	(70-130)	20	4.0
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.400	ug/L	80	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	5.03	ug/L	101	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.31	ug/L	106	(70-130)	20	5.4
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.420	ug/L	84	(50-150)		
LCS1	o-Xylene		5	5.08	ug/L	102	(70-130)		
LCS2	o-Xylene		5	5.41	ug/L	108	(70-130)	20	6.3
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.390	ug/L	78	(50-150)		
LCS1	p-Chlorotoluene		5	4.97	ug/L	99	(70-130)		
LCS2	p-Chlorotoluene		5	5.12	ug/L	102	(70-130)	20	3.0
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.390	ug/L	78	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.17	ug/L	103	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.30	ug/L	106	(70-130)	20	2.5
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.440	ug/L	88	(50-150)		
LCS1	p-Isopropyltoluene		5	5.07	ug/L	101	(70-130)		
LCS2	p-Isopropyltoluene		5	5.27	ug/L	105	(70-130)	20	3.9
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.330	ug/L	66	(50-150)		
LCS1	sec-Butylbenzene		5	4.95	ug/L	99	(70-130)		
LCS2	sec-Butylbenzene		5	5.29	ug/L	106	(70-130)	20	6.6
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Styrene		5	4.95	ug/L	99	(70-130)		
LCS2	Styrene		5	5.10	ug/L	102	(70-130)	20	3.0
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.370	ug/L	74	(50-150)		
LCS1	tert-amyl Methyl Ether		5	6.45	ug/L	129	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	tert-amyl Methyl Ether		5	6.76	ug/L	135	(70-130)	20	4.7
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.510	ug/L	102	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	6.41	ug/L	128	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	6.35	ug/L	127	(70-130)	20	0.94
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.450	ug/L	90	(50-150)		
LCS1	tert-Butylbenzene		5	4.94	ug/L	99	(70-130)		
LCS2	tert-Butylbenzene		5	5.13	ug/L	103	(70-130)	20	3.8
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.330	ug/L	66	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	5.18	ug/L	104	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	5.31	ug/L	106	(70-130)	20	2.5
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.390	ug/L	78	(50-150)		
LCS1	Toluene		5	4.96	ug/L	99	(70-130)		
LCS2	Toluene		5	5.01	ug/L	100	(70-130)	20	1.0
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.370	ug/L	74	(50-150)		
LCS1	Toluene-d8 (S)		5	102	%	102	(70-130)		
LCS2	Toluene-d8 (S)		5	100	%	100	(70-130)		
MBLK	Toluene-d8 (S)			95.8	%	96	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	98.6	%	99	(70-130)		
MRL_W	Toluene-d8 (S)		5	96.4	%	96	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.95	ug/L	99	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.30	ug/L	106	(70-130)	20	6.8
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.370	ug/L	74	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	6.47	ug/L	129	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	6.23	ug/L	125	(70-130)	20	3.8
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.650	ug/L	130	(50-150)		
LCS1	Trichloroethylene (TCE)		5	5.13	ug/L	103	(70-130)		
LCS2	Trichloroethylene (TCE)		5	5.30	ug/L	106	(70-130)	20	3.3
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.400	ug/L	80	(50-150)		
LCS1	Trichlorofluoromethane		5	5.04	ug/L	101	(70-130)		
LCS2	Trichlorofluoromethane		5	5.20	ug/L	104	(70-130)	20	3.1

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.350	ug/L	70	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.24	ug/L	105	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	5.34	ug/L	107	(70-130)	20	1.9
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.380	ug/L	76	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.81	ug/L	96	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.72	ug/L	94	(70-130)	20	1.9
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.430	ug/L	86	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.280	ug/L	112	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1265933 Analytical Batch: 1266344

Analysis Date: 08/05/2020

DUP_202008040302	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0257	ug/L	109	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0253	ug/L	107	(70-130)	30	1.6
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00205	ug/L	109	(50-150)		
MS_202008040300	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00204	ug/L	108	(50-150)		
DUP_202008040302	13C2-PFDA (S)			95.5	%	95	(70-130)		
LCS1	13C2-PFDA (S)		100	98.9	%	99	(70-130)		
LCS2	13C2-PFDA (S)		100	98.1	%	98	(70-130)		
MBLK	13C2-PFDA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.6	%	99	(70-130)		
MS_202008040300	13C2-PFDA (S)		100	102	%	102	(70-130)		
DUP_202008040302	13C2-PFHxA (S)			105	%	105	(70-130)		
LCS1	13C2-PFHxA (S)		100	107	%	107	(70-130)		
LCS2	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MBLK	13C2-PFHxA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MS_202008040300	13C2-PFHxA (S)		100	110	%	110	(70-130)		
DUP_202008040302	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS_202008040300	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008040302	13C3-HFPO-DA (S)			100	%	100	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MBLK	13C3-HFPO-DA (S)			102	%	102	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MS_202008040300	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
DUP_202008040302	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
MS_202008040300	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
DUP_202008040302	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0275	ug/L	116	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0281	ug/L	119	(70-130)	30	2.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00222	ug/L	118	(50-150)		
MS_202008040300	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00235	ug/L	125	(50-150)		
DUP_202008040302	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0262	ug/L	113	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0254	ug/L	109	(70-130)	30	3.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00208	ug/L	112	(50-150)		
MS_202008040300	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00217	ug/L	117	(50-150)		
DUP_202008040302	d3-NMeFOSAA (I)			105	%	105	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			101	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.8	%	100	(50-150)		
MS_202008040300	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
DUP_202008040302	d5-NEtFOSAA (S)			94.4	%	94	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	94.3	%	94	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	99.1	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			96.6	%	97	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	93.8	%	94	(70-130)		
MS_202008040300	d5-NEtFOSAA (S)		100	95.8	%	96	(70-130)		
DUP_202008040302	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0271	ug/L	109	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 884399
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0282	ug/L	113	(70-130)	30	4.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00219	ug/L	109	(50-150)		
MS_202008040300	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00228	ug/L	114	(50-150)		
DUP_202008040302	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0269	ug/L	108	(70-130)	30	0.37
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		
MS_202008040300	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00219	ug/L	109	(50-150)		
DUP_202008040302	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	106	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0278	ug/L	111	(70-130)	30	5.2
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00226	ug/L	113	(50-150)		
MS_202008040300	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00220	ug/L	110	(50-150)		
DUP_202008040302	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0266	ug/L	120	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0259	ug/L	117	(70-130)	30	2.7
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00214	ug/L	121	(50-150)		
MS_202008040300	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00226	ug/L	128	(50-150)		
DUP_202008040302	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0280	ug/L	112	(70-130)	30	0.71
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00231	ug/L	116	(50-150)		
MS_202008040300	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00230	ug/L	115	(50-150)		
DUP_202008040302	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0279	ug/L	112	(70-130)	30	0.0
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202008040300	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00223	ug/L	112	(50-150)		
DUP_202008040302	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0303	ug/L	121	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0313	ug/L	125	(70-130)	30	3.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00248	ug/L	124	(50-150)		
MS_202008040300	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00258	ug/L	127	(50-150)		
DUP_202008040302	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0276	ug/L	121	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0273	ug/L	120	(70-130)	30	1.1
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00225	ug/L	123	(50-150)		
MS_202008040300	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00232	ug/L	127	(50-150)		
DUP_202008040302	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0289	ug/L	116	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0314	ug/L	126	(70-130)	30	8.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00245	ug/L	122	(50-150)		
MS_202008040300	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00257	ug/L	124	(50-150)		
DUP_202008040302	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0279	ug/L	112	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0284	ug/L	114	(70-130)	30	1.8
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00235	ug/L	117	(50-150)		
MS_202008040300	Perfluorononanoic acid (PFNA)	ND	0.002	0.00250	ug/L	125	(50-150)		
DUP_202008040302	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0258	ug/L	112	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0262	ug/L	113	(70-130)	30	1.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00219	ug/L	118	(50-150)		
MS_202008040300	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00228	ug/L	119	(50-150)		
DUP_202008040302	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0295	ug/L	118	(70-130)	30	4.2
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00242	ug/L	121	(50-150)		
MS_202008040300	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00260	ug/L	125	(50-150)		
DUP_202008040302	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0317	ug/L	127	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0318	ug/L	127	(70-130)	30	0.32
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00259	ug/L	129	(50-150)		
MS_202008040300	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00258	ug/L	125	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 884399
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008040302	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0279	ug/L	112	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0275	ug/L	110	(70-130)	30	1.4
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202008040300	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00227	ug/L	113	(50-150)		
DUP_202008040302	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0274	ug/L	110	(70-130)	30	1.1
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202008040300	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00218	ug/L	109	(50-150)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1267424

Analysis Date: 08/10/2020

LCS1	Hexavalent chromium(Dissolved)		2	1.92	ug/L	96	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.92	ug/L	96	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0185	ug/L	93	(50-150)		
MS_202007300286	Hexavalent chromium(Dissolved)	0.67	2	2.82	ug/L	108	(90-110)		
MSD_202007300286	Hexavalent chromium(Dissolved)	0.67	2	2.82	ug/L	108	(90-110)	20	0.12

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

**Non-Compliance Report of Analysis by 18-Hour Colilert Test for
Presence or Absence, Quantification of Fecal Coliform
By Quantitray**

Water Replenishment District
 4040 Paramount Blvd.
 Lakewood, CA 90712
 Attn: Joseph Liles

Project: 0250000
Phone #: 562-275-4226
Date Received: 07/30/2020
Sampled By:
Sample Project Group: WRD Pilot [Set #1]

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal	Coliform

Lab Notification:
fix pricing

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____ NO _____

Approved by _____

Date of Issue: 08/18/2020

Quant Report - Page 1 of 1

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 08/18/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 08/18/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 08/18/2020

Quant Report - Page 1 of 1

Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-34684-1
Client Project/Site: 884399

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
8/10/2020 11:00:38 AM

Lori Thompson, Project Manager I
(714)895-5494
Lori.Thompson@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 884399

Job ID: 570-34684-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 884399

Job ID: 570-34684-1

Job ID: 570-34684-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-34684-1

Comments

No additional comments.

Receipt

The samples were received on 7/31/2020 5:00 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.5° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 884399

Job ID: 570-34684-1

Client Sample ID: 202007300286

Lab Sample ID: 570-34684-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	2.38		0.953	0.762	mg/L	1		1664A	Total/NA

Client Sample ID: 202007300296

Lab Sample ID: 570-34684-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	2.38		0.952	0.762	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 884399

Job ID: 570-34684-1

General Chemistry

Client Sample ID: 202007300286

Date Collected: 07/30/20 10:27

Date Received: 07/31/20 17:00

Lab Sample ID: 570-34684-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	2.38		0.953	0.762	mg/L		08/05/20 14:53	08/05/20 14:53	1

Client Sample ID: 202007300296

Date Collected: 07/30/20 12:27

Date Received: 07/31/20 17:00

Lab Sample ID: 570-34684-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	2.38		0.952	0.762	mg/L		08/05/20 14:53	08/05/20 14:53	1

QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 884399

Job ID: 570-34684-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-85791/1-A
Matrix: Water
Analysis Batch: 85959

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 85791

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		08/05/20 09:30	08/05/20 09:30	1

Lab Sample ID: LCS 570-85791/2-A
Matrix: Water
Analysis Batch: 85959

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 85791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	35.90		mg/L		90	78 - 114

Lab Sample ID: LCSD 570-85791/3-A
Matrix: Water
Analysis Batch: 85959

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 85791

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.00		mg/L		93	78 - 114	3	18

Lab Sample ID: 570-34825-A-1-A MS
Matrix: Water
Analysis Batch: 85959

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 85791

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	1.90		38.0	37.10		mg/L		93	78 - 114

Lab Sample ID: 570-34825-A-1-B MSD
Matrix: Water
Analysis Batch: 85959

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 85791

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	1.90		38.0	36.28		mg/L		90	78 - 114	7	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 884399

Job ID: 570-34684-1

General Chemistry

Prep Batch: 85791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-34684-1	202007300286	Total/NA	Water	1664A	
570-34684-2	202007300296	Total/NA	Water	1664A	
MB 570-85791/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-85791/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-85791/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
570-34825-A-1-A MS	Matrix Spike	Total/NA	Water	1664A	
570-34825-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	

Analysis Batch: 85959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-34684-1	202007300286	Total/NA	Water	1664A	85791
570-34684-2	202007300296	Total/NA	Water	1664A	85791
MB 570-85791/1-A	Method Blank	Total/NA	Water	1664A	85791
LCS 570-85791/2-A	Lab Control Sample	Total/NA	Water	1664A	85791
LCSD 570-85791/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	85791
570-34825-A-1-A MS	Matrix Spike	Total/NA	Water	1664A	85791
570-34825-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	1664A	85791

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 884399

Job ID: 570-34684-1

Client Sample ID: 202007300286

Lab Sample ID: 570-34684-1

Date Collected: 07/30/20 10:27

Matrix: Water

Date Received: 07/31/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1049 mL	1000 mL	85791	08/05/20 14:53	UFLU	ECL 1
Total/NA	Analysis	1664A		1			85959	08/05/20 14:53	UFLU	ECL 1
Instrument ID: NOEQUIP										

Client Sample ID: 202007300296

Lab Sample ID: 570-34684-2

Date Collected: 07/30/20 12:27

Matrix: Water

Date Received: 07/31/20 17:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1050 mL	1000 mL	85791	08/05/20 14:53	UFLU	ECL 1
Total/NA	Analysis	1664A		1			85959	08/05/20 14:53	UFLU	ECL 1
Instrument ID: NOEQUIP										

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 884399

Job ID: 570-34684-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 884399

Job ID: 570-34684-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 884399

Job ID: 570-34684-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-34684-1	202007300286	Water	07/30/20 10:27	07/31/20 17:00	
570-34684-2	202007300296	Water	07/30/20 12:27	07/31/20 17:00	

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34684

Submittal Form

*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder# 884399 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL: TO: us20_subcontract@eurofinsus.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix.
Samples from: CALIFORNIA



Ship To:
Eurofins CalScience
7440 Lincoln Way
Garden Grove, CA 92641-1432
Phone: 714-895-5494 Fax: 714-894-7501
Folder #: 884399 Report Due: 08/13/2020

Sample ID: 202007300286 Client Sample ID for reference onl LH-INF-20200730
Sample Date & Time Matrix: 07/30/20 1027 DW
PWS Systemcode: PWSID
Sample type: JLS
Sample Event: Facility ID: Sample Point ID: Static ID:

Method: EPA 1664
Prep Method: Oil and Grease by 1664(subbed)
Analysis Requested:

Sample ID: 202007300296 Client Sample ID for reference onl MB-INF-20200730
Sample Date & Time Matrix: 07/30/20 1227 DW
PWS Systemcode: PWSID
Sample type: JLS
Sample Event: Facility ID: Sample Point ID: Static ID:

Method: EPA 1664
Prep Method: Oil and Grease by 1664(subbed)
Analysis Requested:

Relinquished by: [Signature] Sample Control Date: 7-31-20 Time: 14:00
Received by: [Signature] Date: 7-31-20 Time: 14:42
Relinquished by: [Signature] Sample Control Date: 7-31-20 Time: 17:00
Received by: [Signature] Date: 7-31-20 Time: 17:00

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS
An Acknowledgement of Receipt is requested to attn: Jackie Contreras

750 Royal Oaks Drive Suite 100 Monrovia CA 91016 Tel (626) 386-1120
Page 1 of 1
13
866-988-0757 www.EurofinsUS.com/Eaton
8/5/2020 5:05

Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-34684-1

Login Number: 34684

List Source: Eurofins Calscience

List Number: 1

Creator: Ramos, Maribel

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 885690
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 885690
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **August 06, 2020 at 1430**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202008060350</u>	GAC-1-20200806 Static ID: 537.1 @537.1	08/06/2020 1103
<u>202008060351</u>	GAC-2-20200806 Static ID: 537.1 @537.1	08/06/2020 1106
<u>202008060352</u>	GAC-3-20200806 Static ID: 537.1 @537.1	08/06/2020 1109
<u>202008060353</u>	GAC-4-20200806 Static ID: 537.1 @537.1	08/06/2020 1112
<u>202008060354</u>	IX-1-20200806 Static ID: 537.1 @537.1	08/06/2020 1115
<u>202008060355</u>	IX-2-20200806 Static ID: 537.1 @537.1	08/06/2020 1118
<u>202008060356</u>	IX-3-20200806 Static ID: 537.1 @537.1	08/06/2020 1121
<u>202008060357</u>	IX-4-20200806 Static ID: 537.1 @537.1	08/06/2020 1124
<u>202008060359</u>	LH-INF-20200806 @537.1 Chloride	08/06/2020 1127
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
<u>202008060360</u>	GAC-5-20200806 @537.1	08/06/2020 1303
<u>202008060361</u>	GAC-6-20200806 @537.1	08/06/2020 1306

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 885690
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **August 06, 2020 at 1430**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202008060362	GAC-7-20200806	08/06/2020 1309
	@537.1	
202008060363	GAC-8-20200806	08/06/2020 1312
	@537.1	
202008060364	IX-5-20200806	08/06/2020 1315
	@537.1	
202008060365	IX-6-20200806	08/06/2020 1318
	@537.1	
202008060366	IX-7-20200806	08/06/2020 1321
	@537.1	
202008060367	IX-8-20200806	08/06/2020 1324
	@537.1	
202008060368	MB-INF-20200806	08/06/2020 1327
	@537.1	
	Chloride	@ANIONS48
		Sulfate
		Alkalinity in CaCO3 units
		Total Organic Carbon
202008060369	FB-HOLD-20200806	08/06/2020 1330
	@537.1 FB	

Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0

8856AD

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 LABORATORY: Eurofins Eaton Analytical	PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID: E-MAIL: mjeon@gsi-net.com	PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) RST	REQUESTED ANALYSES Please check box or fill in blank as needed.									
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD												
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdlorres@gsi-net.com; Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME			Unpreserved	Preserved					
	GAC-1 - 20200806	8-6	1103	Water	2				X			
	GAC-2 - 20200806		1106	Water	2				X			
	GAC-3 - 20200806		1109	Water	2				X			
	GAC-4 - 20200806		1112	Water	2				X			
	IX-1 - 20200806		1115	Water	2				X			
	IX-2 - 20200806		1118	Water	2				X			
	IX-3 - 20200806		1121	Water	2				X			
	IX-4 - 20200806		1124 1124	Water	2				X			
	LH-INF - 20200806		1127 1127	Water	5				X	X	X	
	EH-INF-DUP			Water								
	GAC-5 - 20200806	8-6	1303	Water	2				X			
	GAC-6 - 20200806		1306	Water	2				X			
	GAC-7 - 20200806		1309	Water	2				X			
	GAC-8 - 20200806		1312	Water	2				X			
Relinquished by: (Signature) <u>Miae Jeon</u>						Received by: (Signature) _____			Date: <u>8-6-2020</u> Time: <u>1430</u>			
Relinquished by: (Signature) _____						Received by: (Signature) _____			Date: _____ Time: _____			
Relinquished by: (Signature) _____						Received by: (Signature) _____			Date: _____ Time: _____			

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S) (PRINT): RDT											
TEL: (949) 679-1070 LABORATORY: Eurofins Eaton Analytical		E-MAIL: mjeon@gsi-net.com		REQUESTED ANALYSES Please check box or fill in blank as needed.											
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdorres@gsi-net.com; Provide EDD of sample results													
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)			
		DATE	TIME												
	IX-5-20200806	8-6	1315	Water	2		2		X						
	IX-6-20200806		1318	Water	2		2		X						
	IX-7-20200806		1321	Water	2		2		X						
	IX-8-20200806		1324	Water	2		2		X						
	MB-INF-20200806		1327	Water	5		23		X						
	MB-INF-DUP			Water											
	FB-20200806	8-6	1330	Water	1										
Relinquished by: (Signature) <i>[Signature]</i>													Received by: (Signature) <i>[Signature]</i>	Date: <u>8-6-2020</u>	Time: <u>1430</u>
Relinquished by: (Signature)													Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)													Received by: (Signature)	Date:	Time:



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 555690

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 630A (Observation = 10.4 °C) (Corr. Factor 6.2 °C) (Final = 16.6 °C)

TYPE OF ICE: Real Synthetic No Ice Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251.552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

SIGNATURE: <u>[Signature]</u>	PRINT NAME: <u>FIBEL Chaucer</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>8620</u>	TIME: <u>1609</u>
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/10/2020 15:22	Perfluorohexanoic acid (PFHxA)	202008060355 IX-2-20200806	0.0023		ug/L	0.0020
08/10/2020 15:41	Perfluorohexanoic acid (PFHxA)	202008060356 IX-3-20200806	0.0035		ug/L	0.0020
08/10/2020 18:14	Perfluorohexanoic acid (PFHxA)	202008060357 IX-4-20200806	0.0020		ug/L	0.0020
08/13/2020 02:33	Alkalinity in CaCO3 units	202008060359 LH-INF-20200806	200		mg/L	2.0
08/06/2020 23:46	Chloride		110	250	mg/L	2.5
08/06/2020 23:46	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
08/06/2020 23:46	Nitrate as NO3 (calc)		12	45	mg/L	2.2
08/10/2020 18:24	Perfluorobutanesulfonic acid (PFBS)		0.0064		ug/L	0.0020
08/10/2020 18:24	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
08/10/2020 18:24	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
08/10/2020 18:24	Perfluorononanoic acid (PFNA)		0.0032		ug/L	0.0020
08/10/2020 18:24	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
08/10/2020 18:24	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
08/06/2020 23:46	Sulfate		180	250	mg/L	2.5
08/06/2020 23:46	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
08/12/2020 09:31	Total Organic Carbon		0.59		mg/L	0.30
08/11/2020 13:31	Perfluorohexanoic acid (PFHxA)	202008060364 IX-5-20200806	0.0020		ug/L	0.0020
08/11/2020 13:41	Perfluorohexanoic acid (PFHxA)	202008060365 IX-6-20200806	0.0040		ug/L	0.0020
08/11/2020 13:51	Perfluorohexanoic acid (PFHxA)	202008060366 IX-7-20200806	0.0057		ug/L	0.0020
08/11/2020 14:00	Perfluorohexanoic acid (PFHxA)	202008060367 IX-8-20200806	0.0048		ug/L	0.0020
08/13/2020 23:13	Alkalinity in CaCO3 units	202008060368 MB-INF-20200806	170		mg/L	2.0
08/06/2020 23:33	Chloride		51	250	mg/L	2.5
08/06/2020 23:33	Nitrate as Nitrogen by IC		2.4	10	mg/L	0.50
08/06/2020 23:33	Nitrate as NO3 (calc)		11	45	mg/L	2.2
08/11/2020 13:03	Perfluorobutanesulfonic acid (PFBS)		0.0095		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/11/2020 13:03	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
08/11/2020 13:03	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
08/11/2020 13:03	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
08/11/2020 13:03	Perfluorohexanoic acid (PFHxA)		0.0052		ug/L	0.0020
08/11/2020 13:03	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
08/11/2020 13:03	Perfluorooctanesulfonic acid (PFOS)		0.038		ug/L	0.0020
08/11/2020 13:03	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
08/06/2020 23:33	Sulfate		78	250	mg/L	2.5
08/06/2020 23:33	Total Nitrate, Nitrite-N, CALC		2.4		mg/L	0.10
08/12/2020 09:48	Total Organic Carbon		0.71		mg/L	0.30

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200806 (202008060350)					Sampled on 08/06/2020 1103				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	13C2-PFDA	88	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	13C2-PFHxA	93	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	85	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/07/20	08/10/20 17:17	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	100	%		1

GAC-2-20200806 (202008060351)					Sampled on 08/06/2020 1106				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	13C2-PFDA	76	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	13C2-PFHxA	84	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	138	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	74	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/07/20	08/10/20 17:36	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	100	%		1

GAC-3-20200806 (202008060352)

Sampled on 08/06/2020 1109

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	13C2-PFDA	87	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	13C2-PFHxA	94	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	86	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/07/20	08/10/20 17:45	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-4-20200806 (202008060353)

Sampled on 08/06/2020 1112

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	13C2-PFDA	77	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	13C2-PFHxA	83	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	133	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	74	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/07/20	08/10/20 17:55	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	103	%		1

IX-1-20200806 (202008060354)

Static ID: 537.1

Sampled on 08/06/2020 1115

EPA 537.1 - EPA Method 537.1

08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	13C2-PFDA	90	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	13C2-PFHxA	97	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	89	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	109	%		1
08/07/20	08/10/20 18:05	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

IX-2-20200806 (202008060355)

Sampled on 08/06/2020 1118

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0023	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	13C2-PFDA	93	%		1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	13C2-PFHxA	98	%		1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	90	%		1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	98	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 15:22	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	107	%		1
IX-3-20200806 (202008060356)						Sampled on 08/06/2020 1121			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	13C2-PFDA	89	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	13C2-PFHxA	93	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	84	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/07/20	08/10/20 15:41	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	98	%		1

IX-4-20200806 (202008060357)						Sampled on 08/06/2020 1124			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	13C2-PFDA	82	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	13C2-PFHxA	87	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	132	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	78	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	109	%		1
08/07/20	08/10/20 18:14	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	106	%		1

LH-INF-20200806 (202008060359)

Sampled on 08/06/2020 1127

SM 5310C - Total Organic Carbon

08/12/20 09:31	1267505	(SM 5310C)	Total Organic Carbon	0.59	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

08/06/20 23:46	1266582	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
08/06/20 23:46	1266582	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
08/06/20 23:46	1266582	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/06/20 23:46	1266582	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

08/06/20 23:46	1266642	(EPA 300.0)	Chloride	110	mg/L	2.5	5
08/06/20 23:46	1266642	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

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 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0064	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0032	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	13C2-PFDA	89	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	13C2-PFHxA	94	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	83	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	111	%		1
08/07/20	08/10/20 18:24	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	102	%		1

SM 2320B - Alkalinity in CaCO3 units

08/13/20 02:33	1268094	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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GAC-5-20200806 (202008060360)

Sampled on 08/06/2020 1303

EPA 537.1 - EPA Method 537.1

08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	13C2-PFDA	78	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	13C2-PFHxA	84	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	130	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	77	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	109	%		1
08/07/20	08/10/20 18:33	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-6-20200806 (202008060361)

Sampled on 08/06/2020 1306

EPA 537.1 - EPA Method 537.1

08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	13C2-PFDA	81	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	13C2-PFHxA	90	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	81	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/07/20	08/10/20 18:43	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	101	%		1

GAC-7-20200806 (202008060362)

Sampled on 08/06/2020 1309

EPA 537.1 - EPA Method 537.1

08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	13C2-PFDA	81	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	13C2-PFHxA	89	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	83	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/07/20	08/10/20 18:52	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	99	%		1

GAC-8-20200806 (202008060363)

Sampled on 08/06/2020 1312

EPA 537.1 - EPA Method 537.1

08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	13C2-PFDA	94	%		1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	13C2-PFHxA	109	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	13C3-HFPO-DA	98	%		1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/07/20	08/10/20 19:02	1266665	1267398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

IX-5-20200806 (202008060364)

Sampled on 08/06/2020 1315

EPA 537.1 - EPA Method 537.1

08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	13C2-PFDA	115	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	13C2-PFHxA	124	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	13C3-HFPO-DA	116	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	d3-NMeFOSAA	101	%		1
08/07/20	08/11/20 13:31	1266855	1267872	(EPA 537.1)	d5-NEtFOSAA	113	%		1

IX-6-20200806 (202008060365)

Sampled on 08/06/2020 1318

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	13C2-PFDA	118	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	13C2-PFHxA	128	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	13C3-HFPO-DA	119	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	d3-NMeFOSAA	98	%		1
08/07/20	08/11/20 13:41	1266855	1267872	(EPA 537.1)	d5-NEtFOSAA	114	%		1

IX-7-20200806 (202008060366)

Sampled on 08/06/2020 1321

EPA 537.1 - EPA Method 537.1									
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 1430

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	13C2-PFDA	119	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	13C2-PFHxA	126	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	13C3-HFPO-DA	121	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	d3-NMeFOSAA	95	%		1
08/07/20	08/11/20 13:51	1266855	1267872	(EPA 537.1)	d5-NEtFOSAA	116	%		1

IX-8-20200806 (202008060367)

Sampled on 08/06/2020 1324

EPA 537.1 - EPA Method 537.1

08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0048	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	13C2-PFDA	117	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	13C2-PFHxA	126	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	13C3-HFPO-DA	120	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	13C4-PFOA- IS#2	97	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	d3-NMeFOSAA	98	%		1
08/07/20	08/11/20 14:00	1266855	1267872	(EPA 537.1)	d5-NEtFOSAA	111	%		1

MB-INF-20200806 (202008060368)

Sampled on 08/06/2020 1327

SM 5310C - Total Organic Carbon

08/12/20 09:48	1267505	(SM 5310C)	Total Organic Carbon	0.71	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

08/06/20 23:33	1266582	(EPA 300.0)	Nitrate as Nitrogen by IC	2.4	mg/L	0.50	5
08/06/20 23:33	1266582	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
08/06/20 23:33	1266582	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/06/20 23:33	1266582	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.4	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

08/06/20 23:33	1266642	(EPA 300.0)	Chloride	51	mg/L	2.5	5
08/06/20 23:33	1266642	(EPA 300.0)	Sulfate	78	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0095	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0052	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.038	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	13C2-PFDA	114	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	13C2-PFHxA	125	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	13C3-HFPO-DA	115	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	d3-NMeFOSAA	96	%		1
08/07/20	08/11/20 13:03	1266855	1267872	(EPA 537.1)	d5-NEtFOSAA	113	%		1

SM 2320B - Alkalinity in CaCO3 units

08/13/20 23:13	1268433	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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FB-HOLD-20200806 (202008060369)

Sampled on 08/06/2020 1330

EPA 537.1 - EPA Method 537.1

08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/06/2020 14:30

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	13C2-PFDA	86	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	13C2-PFHxA	96	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	13C3-HFPO-DA	86	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/13/20	08/14/20 19:45	1268005	1268907	(EPA 537.1)	d5-NEtFOSAA	96	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 885690
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1266582

202008060359 LH-INF-20200806
 202008060368 MB-INF-20200806

Analysis Date: 08/06/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1266642

202008060359 LH-INF-20200806
 202008060368 MB-INF-20200806

Analysis Date: 08/06/2020

Analyzed by: HL7J
 Analyzed by: HL7J

EPA Method 537.1

Prep Batch: 1266665 Analytical Batch: 1267398

202008060350 GAC-1-20200806
 202008060351 GAC-2-20200806
 202008060352 GAC-3-20200806
 202008060353 GAC-4-20200806
 202008060354 IX-1-20200806
 202008060355 IX-2-20200806
 202008060356 IX-3-20200806
 202008060357 IX-4-20200806
 202008060359 LH-INF-20200806
 202008060360 GAC-5-20200806
 202008060361 GAC-6-20200806
 202008060362 GAC-7-20200806
 202008060363 GAC-8-20200806

Analysis Date: 08/10/2020

Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ

Total Organic Carbon

Analytical Batch: 1267505

202008060359 LH-INF-20200806
 202008060368 MB-INF-20200806

Analysis Date: 08/12/2020

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

EPA Method 537.1

Prep Batch: 1266855 Analytical Batch: 1267872

202008060364 IX-5-20200806
 202008060365 IX-6-20200806
 202008060366 IX-7-20200806
 202008060367 IX-8-20200806
 202008060368 MB-INF-20200806

Analysis Date: 08/11/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

Alkalinity in CaCO3 units

Analytical Batch: 1268094

202008060359 LH-INF-20200806

Analysis Date: 08/13/2020

Analyzed by: ZS6I

Alkalinity in CaCO3 units

Analytical Batch: 1268433

202008060368 MB-INF-20200806

Analysis Date: 08/13/2020

Analyzed by: ZS6I

EPA Method 537.1

Prep Batch: 1268005 Analytical Batch: 1268907

Analysis Date: 08/14/2020



Eaton Analytical

Tel: (626) 386-1100
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1 800 566 LABS (1 800 566 5227)

Laboratory QC Summary

Report: 885690
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

202008060369

FB-HOLD-20200806

Analyzed by: SZZ

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1266582					Analysis Date: 08/06/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0482	mg/L	96	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0112	mg/L	90	(50-150)		
MS_202008060423	Nitrate as Nitrogen by IC	9.8	2.6	12.6	mg/L	108	(80-120)		
MS_202008060535	Nitrate as Nitrogen by IC	8.6	6.5	15.2	mg/L	106	(80-120)		
MSD_202008060423	Nitrate as Nitrogen by IC	9.8	2.6	12.6	mg/L	109	(80-120)	20	0.35
MSD_202008060535	Nitrate as Nitrogen by IC	8.6	6.5	15.3	mg/L	107	(80-120)	20	0.49
LCS1	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.03	mg/L	103	(90-110)	20	0.98
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0435	mg/L	87	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0125	mg/L	100	(50-150)		
MS_202008060423	Nitrite Nitrogen by IC	ND	1	1.02	mg/L	102	(80-120)		
MS_202008060535	Nitrite Nitrogen by IC	ND	2.5	2.50	mg/L	100	(80-120)		
MSD_202008060423	Nitrite Nitrogen by IC	ND	1	1.03	mg/L	103	(80-120)	20	0.83
MSD_202008060535	Nitrite Nitrogen by IC	ND	2.5	2.54	mg/L	102	(80-120)	20	1.5
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1266642					Analysis Date: 08/06/2020				
LCS1	Chloride		25	26.9	mg/L	108	(90-110)		
LCS2	Chloride		25	27.0	mg/L	108	(90-110)	20	0.37
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.465	mg/L	93	(50-150)		
MS_202008070546	Chloride	46	26	73.8	mg/L	111	(80-120)		
MSD_202008070546	Chloride	46	26	74.0	mg/L	112	(80-120)	20	0.32
LCS1	Sulfate		50	53.2	mg/L	106	(90-110)		
LCS2	Sulfate		50	53.2	mg/L	106	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.02	mg/L	102	(50-150)		
MRL_W	Sulfate		0.25	0.253	mg/L	101	(50-150)		
MS_202008070546	Sulfate	79	50	134	mg/L	111	(80-120)		
MSD_202008070546	Sulfate	79	50	135	mg/L	112	(80-120)	20	0.42

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Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1266665 Analytical Batch: 1267398					Analysis Date: 08/10/2020				
DUP_202008060356	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0473	ug/L	100	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)	30	3.1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00185	ug/L	98	(50-150)		
MS2_202008060355	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0461	ug/L	98	(70-130)		
DUP_202008060356	13C2-PFDA (S)			89.5	%	90	(70-130)		
LCS3	13C2-PFDA (S)		100	98.3	%	98	(70-130)		
LCS4	13C2-PFDA (S)		100	98.1	%	98	(70-130)		
MBLK	13C2-PFDA (S)			105	%	105	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.3	%	98	(70-130)		
MS2_202008060355	13C2-PFDA (S)		100	88.6	%	89	(70-130)		
DUP_202008060356	13C2-PFHxA (S)			98.6	%	99	(70-130)		
LCS3	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFHxA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MS2_202008060355	13C2-PFHxA (S)		100	98.0	%	98	(70-130)		
DUP_202008060356	13C2-PFOA- IS#1 (I)			116	%	116	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	92.6	%	93	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	93.8	%	94	(50-150)		
MS2_202008060355	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
DUP_202008060356	13C3-HFPO-DA (S)			89.4	%	89	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	99.0	%	99	(70-130)		
MBLK	13C3-HFPO-DA (S)			97.0	%	97	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	99.3	%	99	(70-130)		
MS2_202008060355	13C3-HFPO-DA (S)		100	88.5	%	88	(70-130)		
DUP_202008060356	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	92.3	%	92	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	95.4	%	95	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			99.9	%	100	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	95.5	%	95	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202008060355	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
DUP_202008060356	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0524	ug/L	108	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0538	ug/L	111	(70-130)	30	2.6
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00226	ug/L	120	(50-150)		
MS2_202008060355	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0477	ug/L	98	(70-130)		
DUP_202008060356	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0494	ug/L	106	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0495	ug/L	106	(70-130)	30	0.20
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00203	ug/L	109	(50-150)		
MS2_202008060355	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0463	ug/L	99	(70-130)		
DUP_202008060356	d3-NMeFOSAA (I)			99.3	%	99	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	90.6	%	91	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	97.6	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			87.3	%	87	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	85.9	%	86	(50-150)		
MS2_202008060355	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
DUP_202008060356	d5-NEtFOSAA (S)			97.8	%	98	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	94.7	%	95	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	93.6	%	94	(70-130)		
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	99.8	%	100	(70-130)		
MS2_202008060355	d5-NEtFOSAA (S)		100	94.7	%	95	(70-130)		
DUP_202008060356	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0544	ug/L	109	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0539	ug/L	108	(70-130)	30	0.92
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00226	ug/L	113	(50-150)		
MS2_202008060355	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0488	ug/L	98	(70-130)		
DUP_202008060356	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0537	ug/L	107	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0528	ug/L	106	(70-130)	30	1.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00245	ug/L	123	(50-150)		
MS2_202008060355	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0522	ug/L	104	(70-130)		
DUP_202008060356	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0545	ug/L	109	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0545	ug/L	109	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00233	ug/L	117	(50-150)		
MS2_202008060355	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0529	ug/L	106	(70-130)		
DUP_202008060356	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0501	ug/L	113	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0491	ug/L	111	(70-130)	30	2.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00205	ug/L	116	(50-150)		
MS2_202008060355	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0497	ug/L	111	(70-130)		
DUP_202008060356	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0538	ug/L	108	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0552	ug/L	110	(70-130)	30	2.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00231	ug/L	116	(50-150)		
MS2_202008060355	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0494	ug/L	99	(70-130)		
DUP_202008060356	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0553	ug/L	111	(70-130)	30	1.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00238	ug/L	119	(50-150)		
MS2_202008060355	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0475	ug/L	95	(70-130)		
DUP_202008060356	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0584	ug/L	117	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0592	ug/L	118	(70-130)	30	1.2
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00259	ug/L	130	(50-150)		
MS2_202008060355	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0538	ug/L	107	(70-130)		
DUP_202008060356	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0523	ug/L	115	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0527	ug/L	116	(70-130)	30	0.76
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00213	ug/L	117	(50-150)		
MS2_202008060355	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0504	ug/L	111	(70-130)		
DUP_202008060356	Perfluorohexanoic acid (PFHxA)	0.0035		0.00344	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0578	ug/L	116	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0586	ug/L	117	(70-130)	30	1.4

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00257	ug/L	128	(50-150)		
MS2_202008060355	Perfluorohexanoic acid (PFHxA)	0.0023	0.05	0.0549	ug/L	105	(70-130)		
DUP_202008060356	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0552	ug/L	110	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0559	ug/L	112	(70-130)	30	1.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00242	ug/L	121	(50-150)		
MS2_202008060355	Perfluorononanoic acid (PFNA)	ND	0.05	0.0507	ug/L	101	(70-130)		
DUP_202008060356	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0510	ug/L	110	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0510	ug/L	110	(70-130)	30	0.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00230	ug/L	124	(50-150)		
MS2_202008060355	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0505	ug/L	109	(70-130)		
DUP_202008060356	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0574	ug/L	115	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0581	ug/L	116	(70-130)	30	1.2
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00250	ug/L	125	(50-150)		
MS2_202008060355	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0547	ug/L	109	(70-130)		
DUP_202008060356	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0563	ug/L	113	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0574	ug/L	115	(70-130)	30	1.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00229	ug/L	114	(50-150)		
MS2_202008060355	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0534	ug/L	107	(70-130)		
DUP_202008060356	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0555	ug/L	111	(70-130)	30	0.72
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00225	ug/L	112	(50-150)		
MS2_202008060355	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0468	ug/L	94	(70-130)		
DUP_202008060356	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0540	ug/L	108	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0538	ug/L	108	(70-130)	30	0.19
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00222	ug/L	111	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202008060355	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0478	ug/L	96	(70-130)		

Total Organic Carbon by SM 5310C

Analytical Batch: 1267505

Analysis Date: 08/12/2020

LCS1	Total Organic Carbon		5	4.61	mg/L	92	(90-110)		
LCS2	Total Organic Carbon		5	4.63	mg/L	93	(90-110)	20	0.43
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.234	mg/L	117	(50-150)		
MS_202008060456	Total Organic Carbon	ND	4	3.99	mg/L	98	(80-120)		
MS2_202008070404	Total Organic Carbon	2.1	2	4.13	mg/L	103	(80-120)		
MSD_202008060456	Total Organic Carbon	ND	4	3.98	mg/L	98	(80-120)	20	0.23
MSD2_202008070404	Total Organic Carbon	2.1	2	4.21	mg/L	108	(80-120)	20	2.0

EPA Method 537.1 by EPA 537.1

Prep Batch: 1266855 Analytical Batch: 1267872

Analysis Date: 08/11/2020

DUP_202008060368	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0556	ug/L	118	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0556	ug/L	118	(70-130)	30	0.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00202	ug/L	108	(50-150)		
MS2_202008060448	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0564	ug/L	120	(70-130)		
DUP_202008060368	13C2-PFDA (S)			110	%	110	(70-130)		
LCS3	13C2-PFDA (S)		100	116	%	116	(70-130)		
LCS4	13C2-PFDA (S)		100	114	%	114	(70-130)		
MBLK	13C2-PFDA (S)			115	%	115	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	109	%	109	(70-130)		
MS2_202008060448	13C2-PFDA (S)		100	118	%	118	(70-130)		
DUP_202008060368	13C2-PFHxA (S)			126	%	126	(70-130)		
LCS3	13C2-PFHxA (S)		100	122	%	122	(70-130)		
LCS4	13C2-PFHxA (S)		100	119	%	119	(70-130)		
MBLK	13C2-PFHxA (S)			123	%	123	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	117	%	117	(70-130)		
MS2_202008060448	13C2-PFHxA (S)		100	123	%	123	(70-130)		
DUP_202008060368	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	94.5	%	95	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MS2_202008060448	13C2-PFOA- IS#1 (I)		100	96.1	%	96	(50-150)		

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Report: 885690
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008060368	13C3-HFPO-DA (S)			110	%	110	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	118	%	118	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	118	%	118	(70-130)		
MBLK	13C3-HFPO-DA (S)			118	%	119	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	111	%	111	(70-130)		
MS2_202008060448	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
DUP_202008060368	13C4-PFOS- IS#2 (I)			96.8	%	97	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	94.0	%	94	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	97.2	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			97.5	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MS2_202008060448	13C4-PFOS- IS#2 (I)		100	94.8	%	95	(50-150)		
DUP_202008060368	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0577	ug/L	119	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0581	ug/L	120	(70-130)	30	0.69
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00219	ug/L	116	(50-150)		
MS2_202008060448	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0586	ug/L	121	(70-130)		
DUP_202008060368	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0550	ug/L	118	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0567	ug/L	122	(70-130)	30	3.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00195	ug/L	105	(50-150)		
MS2_202008060448	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0562	ug/L	121	(70-130)		
DUP_202008060368	d3-NMeFOSAA (I)			98.4	%	98	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	97.7	%	98	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			102	%	102	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MS2_202008060448	d3-NMeFOSAA (I)		100	99.4	%	99	(50-150)		
DUP_202008060368	d5-NEtFOSAA (S)			112	%	112	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MBLK	d5-NEtFOSAA (S)			108	%	109	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MS2_202008060448	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
DUP_202008060368	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0576	ug/L	115	(70-130)		

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Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0591	ug/L	118	(70-130)	30	2.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00209	ug/L	105	(50-150)		
MS2_202008060448	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0583	ug/L	117	(70-130)		
DUP_202008060368	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0556	ug/L	111	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0556	ug/L	111	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202008060448	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0552	ug/L	110	(70-130)		
DUP_202008060368	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0552	ug/L	110	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0571	ug/L	114	(70-130)	30	3.4
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	112	(50-150)		
MS2_202008060448	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0573	ug/L	115	(70-130)		
DUP_202008060368	Perfluorobutanesulfonic acid (PFBS)	0.0095		0.00948	ug/L		(0-30)	30	0.65
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0533	ug/L	120	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0546	ug/L	123	(70-130)	30	2.4
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00196	ug/L	111	(50-150)		
MS2_202008060448	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0530	ug/L	120	(70-130)		
DUP_202008060368	Perfluorodecanoic acid (PFDA)	0.0020		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0599	ug/L	120	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0597	ug/L	119	(70-130)	30	0.33
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00213	ug/L	106	(50-150)		
MS2_202008060448	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0602	ug/L	120	(70-130)		
DUP_202008060368	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0572	ug/L	114	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0552	ug/L	110	(70-130)	30	3.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00207	ug/L	104	(50-150)		
MS2_202008060448	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0577	ug/L	115	(70-130)		
DUP_202008060368	Perfluoroheptanoic acid (PFHpA)	0.0039		0.00382	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0619	ug/L	124	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0626	ug/L	125	(70-130)	30	1.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 885690
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00232	ug/L	116	(50-150)		
MS2_202008060448	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0621	ug/L	124	(70-130)		
DUP_202008060368	Perfluorohexanesulfonic acid (PFHxS)	0.0066		0.00670	ug/L		(0-30)	30	1.4
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0554	ug/L	122	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0553	ug/L	121	(70-130)	30	0.18
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00201	ug/L	110	(50-150)		
MS2_202008060448	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0549	ug/L	120	(70-130)		
DUP_202008060368	Perfluorohexanoic acid (PFHxA)	0.0052		0.00531	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0598	ug/L	120	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0611	ug/L	122	(70-130)	30	2.1
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00229	ug/L	114	(50-150)		
MS2_202008060448	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0612	ug/L	122	(70-130)		
DUP_202008060368	Perfluorononanoic acid (PFNA)	0.0034		0.00354	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0584	ug/L	117	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0598	ug/L	120	(70-130)	30	2.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00220	ug/L	110	(50-150)		
MS2_202008060448	Perfluorononanoic acid (PFNA)	ND	0.05	0.0597	ug/L	119	(70-130)		
DUP_202008060368	Perfluorooctanesulfonic acid (PFOS)	0.038		0.0369	ug/L		(0-30)	30	2.4
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0551	ug/L	119	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0563	ug/L	122	(70-130)	30	2.1
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00200	ug/L	108	(50-150)		
MS2_202008060448	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0545	ug/L	117	(70-130)		
DUP_202008060368	Perfluorooctanoic acid (PFOA)	0.016		0.0158	ug/L		(0-30)	30	0.11
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0593	ug/L	119	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0607	ug/L	121	(70-130)	30	2.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00235	ug/L	117	(50-150)		
MS2_202008060448	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0614	ug/L	122	(70-130)		
DUP_202008060368	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0566	ug/L	113	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0571	ug/L	114	(70-130)	30	0.88
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00217	ug/L	109	(50-150)		
MS2_202008060448	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0584	ug/L	117	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008060368	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0592	ug/L	118	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0580	ug/L	116	(70-130)	30	2.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202008060448	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0600	ug/L	120	(70-130)		
DUP_202008060368	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0568	ug/L	114	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0567	ug/L	113	(70-130)	30	0.18
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00215	ug/L	108	(50-150)		
MS2_202008060448	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0573	ug/L	115	(70-130)		

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1268094

Analysis Date: 08/12/2020

LCS1	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)	20	0.0
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.03	mg/L	101	(50-150)		
MS_202008060140	Alkalinity in CaCO3 units	370	100	482	mg/L	108	(80-120)		
MS_202008060450	Alkalinity in CaCO3 units	310	100	419	mg/L	108	(80-120)		
MSD_202008060140	Alkalinity in CaCO3 units	370	100	482	mg/L	108	(80-120)	20	0.019
MSD_202008060450	Alkalinity in CaCO3 units	310	100	419	mg/L	108	(80-120)	20	0.12

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1268433

Analysis Date: 08/13/2020

LCS1	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.8	mg/L	100	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.01	mg/L	100	(50-150)		
MS_202008060451	Alkalinity in CaCO3 units	190	100	226	mg/L	<u>37</u>	(80-120)		
MS_202008060452	Alkalinity in CaCO3 units	190	100	213	mg/L	<u>20</u>	(80-120)		
MSD_202008060451	Alkalinity in CaCO3 units	190	100	233	mg/L	<u>43</u>	(80-120)	20	3.0
MSD_202008060452	Alkalinity in CaCO3 units	190	100	216	mg/L	<u>24</u>	(80-120)	20	1.5

EPA Method 537.1 by EPA 537.1

Prep Batch: 1268005 Analytical Batch: 1268907

Analysis Date: 08/14/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0248	ug/L	105	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0242	ug/L	103	(70-130)	30	2.0

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00190	ug/L	101	(50-150)		
MS1_202008120539	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0228	ug/L	97	(70-130)		
MSD1_202008120539	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0230	ug/L	98	(70-130)	30	1
LCS1	13C2-PFDA (S)		100	88.6	%	89	(70-130)		
LCS2	13C2-PFDA (S)		100	91.2	%	91	(70-130)		
MBLK	13C2-PFDA (S)			88.5	%	88	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	86.8	%	87	(70-130)		
MS1_202008120539	13C2-PFDA (S)		100	93.7	%	94	(70-130)		
MSD1_202008120539	13C2-PFDA (S)		100	90.4	%	90	(70-130)		
LCS1	13C2-PFHxA (S)		100	98.3	%	98	(70-130)		
LCS2	13C2-PFHxA (S)		100	97.1	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			96.8	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	94.8	%	95	(70-130)		
MS1_202008120539	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MSD1_202008120539	13C2-PFHxA (S)		100	98.6	%	99	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			114	%	114	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
MS1_202008120539	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MSD1_202008120539	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	89.2	%	89	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	87.9	%	88	(70-130)		
MBLK	13C3-HFPO-DA (S)			85.9	%	86	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	88.3	%	88	(70-130)		
MS1_202008120539	13C3-HFPO-DA (S)		100	96.6	%	97	(70-130)		
MSD1_202008120539	13C3-HFPO-DA (S)		100	91.0	%	91	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.5	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			104	%	104	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.2	%	99	(50-150)		
MS1_202008120539	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MSD1_202008120539	13C4-PFOS- IS#2 (I)		100	99.5	%	99	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0270	ug/L	114	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0264	ug/L	112	(70-130)	30	2.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00211	ug/L	112	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 885690
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202008120539	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0261	ug/L	111	(70-130)		
MSD1_202008120539	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0260	ug/L	110	(70-130)	30	0.46
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0263	ug/L	113	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0261	ug/L	112	(70-130)	30	0.76
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00205	ug/L	110	(50-150)		
MS1_202008120539	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0246	ug/L	106	(70-130)		
MSD1_202008120539	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0249	ug/L	107	(70-130)	30	1.2
LCS1	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	108	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			105	%	105	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS1_202008120539	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MSD1_202008120539	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	94.6	%	95	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	95.2	%	95	(70-130)		
MBLK	d5-NEtFOSAA (S)			94.4	%	94	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.6	%	95	(70-130)		
MS1_202008120539	d5-NEtFOSAA (S)		100	99.7	%	100	(70-130)		
MSD1_202008120539	d5-NEtFOSAA (S)		100	97.5	%	98	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0252	ug/L	101	(70-130)	30	0.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00193	ug/L	96	(50-150)		
MS1_202008120539	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0243	ug/L	97	(70-130)		
MSD1_202008120539	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0246	ug/L	98	(70-130)	30	1.3
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0279	ug/L	112	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0279	ug/L	112	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	106	(50-150)		
MS1_202008120539	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0269	ug/L	107	(70-130)		
MSD1_202008120539	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0265	ug/L	106	(70-130)	30	1.4
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0280	ug/L	112	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0277	ug/L	111	(70-130)	30	1.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	112	(50-150)		
MS1_202008120539	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0270	ug/L	108	(70-130)		
MSD1_202008120539	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0276	ug/L	110	(70-130)	30	2.4

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 885690
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0247	ug/L	111	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0246	ug/L	111	(70-130)	30	0.41
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00196	ug/L	111	(50-150)		
MS1_202008120539	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0237	ug/L	107	(70-130)		
MSD1_202008120539	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0241	ug/L	109	(70-130)	30	1.5
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0263	ug/L	105	(70-130)	30	0.38
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202008120539	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0251	ug/L	100	(70-130)		
MSD1_202008120539	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0251	ug/L	100	(70-130)	30	0.14
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0256	ug/L	102	(70-130)	30	0.78
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00192	ug/L	96	(50-150)		
MS1_202008120539	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0238	ug/L	95	(70-130)		
MSD1_202008120539	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0237	ug/L	95	(70-130)	30	0.24
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0301	ug/L	121	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0313	ug/L	125	(70-130)	30	3.9
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00238	ug/L	119	(50-150)		
MS1_202008120539	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0289	ug/L	115	(70-130)		
MSD1_202008120539	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0292	ug/L	117	(70-130)	30	1.2
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0276	ug/L	121	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0271	ug/L	119	(70-130)	30	1.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00222	ug/L	122	(50-150)		
MS1_202008120539	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0259	ug/L	114	(70-130)		
MSD1_202008120539	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0266	ug/L	117	(70-130)	30	2.6
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0284	ug/L	114	(70-130)	30	0.71
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00227	ug/L	114	(50-150)		
MS1_202008120539	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0271	ug/L	108	(70-130)		
MSD1_202008120539	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0270	ug/L	108	(70-130)	30	0.38
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0273	ug/L	109	(70-130)	30	1.8

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202008120539	Perfluorononanoic acid (PFNA)	ND	0.025	0.0266	ug/L	106	(70-130)		
MSD1_202008120539	Perfluorononanoic acid (PFNA)	ND	0.025	0.0262	ug/L	105	(70-130)	30	1.2
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0275	ug/L	119	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0268	ug/L	116	(70-130)	30	2.2
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00229	ug/L	124	(50-150)		
MS1_202008120539	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0256	ug/L	110	(70-130)		
MSD1_202008120539	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0258	ug/L	111	(70-130)	30	0.76
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0291	ug/L	116	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0286	ug/L	114	(70-130)	30	1.7
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00237	ug/L	119	(50-150)		
MS1_202008120539	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0286	ug/L	114	(70-130)		
MSD1_202008120539	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0276	ug/L	110	(70-130)	30	3.6
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0316	ug/L	127	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0308	ug/L	123	(70-130)	30	2.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00239	ug/L	119	(50-150)		
MS1_202008120539	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0297	ug/L	119	(70-130)		
MSD1_202008120539	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0293	ug/L	117	(70-130)	30	1.4
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0262	ug/L	105	(70-130)	30	0.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00194	ug/L	97	(50-150)		
MS1_202008120539	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0251	ug/L	101	(70-130)		
MSD1_202008120539	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0248	ug/L	99	(70-130)	30	1.4
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0257	ug/L	103	(70-130)	30	1.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00201	ug/L	100	(50-150)		
MS1_202008120539	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0245	ug/L	98	(70-130)		
MSD1_202008120539	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0243	ug/L	97	(70-130)	30	0.94

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Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 08/17/2020

Quant Report - Page 1 of 1

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
Comment: _____
Approved by: _____

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 08/17/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 08/17/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 887122
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 887122
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **August 13, 2020 at 1157**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202008130373	GAC-1-20200813 Static ID: 537.1 @537.1	08/13/2020 0833
202008130374	GAC-2-20200813 Static ID: 537.1 @537.1	08/13/2020 0836
202008130375	GAC-3-20200813 Static ID: 537.1 @537.1	08/13/2020 0839
202008130376	GAC-4-20200813 Static ID: 537.1 @537.1	08/13/2020 0842
202008130377	IX-1-20200813 Static ID: 537.1 @537.1	08/13/2020 0845
202008130378	IX-2-20200813 Static ID: 537.1 @537.1	08/13/2020 0848
202008130379	IX-3-20200813 Static ID: 537.1 @537.1	08/13/2020 0851
202008130380	IX-4-20200813 Static ID: 537.1 @537.1	08/13/2020 0854
202008130382	LH-INF-20200813 @537.1 Chloride	08/13/2020 0857
	@ANIONS48 Sulfate	Alkalinity in CaCO3 units Total Organic Carbon
202008130383	GAC-5-20200813 @537.1	08/13/2020 1033
202008130384	GAC-6-20200813 @537.1	08/13/2020 1036

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 887122
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **August 13, 2020 at 1157**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202008130385</u>	GAC-7-20200813	08/13/2020 1039
	@537.1	
<u>202008130386</u>	GAC-8-20200813	08/13/2020 1042
	@537.1	
<u>202008130387</u>	IX-5-20200813	08/13/2020 1045
	@537.1	
<u>202008130388</u>	IX-6-20200813	08/13/2020 1048
	@537.1	
<u>202008130389</u>	IX-7-20200813	08/13/2020 1051
	@537.1	
<u>202008130390</u>	IX-8-20200813	08/13/2020 1054
	@537.1	
<u>202008130391</u>	MB-INF-20200813	08/13/2020 1057
	@537.1	
	Chloride	@ANIONS48
		Sulfate
		Alkalinity in CaCO3 units
		Total Organic Carbon
<u>202008130392</u>	MB-INF-DUP-20200813	08/13/2020 1100
	@537.1	
<u>202008130393</u>	FB-HOLD-20200813	08/13/2020 0900
	@537.1 FB	

Test Description

- @537.1 -- EPA Method 537.1
- @537.1 FB -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0

884122

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070			PROJECT NAME: WRD Pilot			PROJECT NO.: 5302			
E-MAIL: mjeon@gsi-net.com			PROJECT CONTACT: Miae Jeon			LAB CONTACT: Sophia Liang			
LABORATORY: Eurofins Eaton Analytical			GLOBAL ID:			SAMPLER(S): (PRINT) <i>RDT</i>			
REQUESTED ANALYSES Please check box or fill in blank as needed.									
LAB USE ONLY	SAMPLE ID	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	
						PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
	GAC-1 - 20200813	8-13	0833	Water	2	2	2	X	
	GAC-2 - 20200813		0836	Water	2	2	2	X	
	GAC-3 - 20200813		0839	Water	2	2	2	X	
	GAC-4 - 20200813		0842	Water	2	2	2	X	
	IX-1 - 20200813		0845	Water	2	2	2	X	
	IX-2 - 20200813		0848	Water	2	2	2	X	
	IX-3 - 20200813		0851	Water	2	2	2	X	
	IX-4 - 20200813		0854	Water	2	2	2	X	
	LH-INF-20200813		0857	Water	5	2	3	X	
	LH-INF-BUP			Water				X	
	GAC-5 - 20200813	8-13	1033	Water	2	2	2	X	
	GAC-6 - 20200813		1036	Water	2	2	2	X	
	GAC-7 - 20200813		1039	Water	2	2	2	X	
	GAC-8 - 20200813		1042	Water	2	2	2	X	
Relinquished by: (Signature) <i>Walt Torres</i>						Received by: (Signature) <i>[Signature]</i>		Date: 8-13-2020	Time: 157
Relinquished by: (Signature)						Received by: (Signature)		Date:	Time:
Relinquished by: (Signature)						Received by: (Signature)		Date:	Time:

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gssi-net.com LABORATORY: Eurofins Eaton Analytical			PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) <u>RDT</u>												
REQUESTED ANALYSES Please check box or fill in blank as needed.																	
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	Field Filtered	Unpreserved	Preserved	HOLD	
		DATE	TIME			Unpreserved	Preserved										
	IX-5-20200813	8-13	1045	Water	2			2	X								
	IX-6-20200813	↓	1048	Water	2			2	X								
	IX-7-20200813	↓	1051	Water	2			2	X								
	IX-8-20200813	↓	1054	Water	2			2	X								
	MB-INF-20200813	↓	1057	Water	5			2	X								
	MB-INF-DUP - 20200813	↓	1100	Water	2			2	X								
	FB-20200813	↓	0900	Water	1			1	X								
Relinquished by: (Signature) <u>Dobro Tures</u>							Received by: (Signature) _____		Date: <u>8-13-2020</u>		Time: <u>1157</u>						
Relinquished by: (Signature) _____							Received by: (Signature) _____		Date: _____		Time: _____						
Relinquished by: (Signature) _____							Received by: (Signature) _____		Date: _____		Time: _____						



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: SFADL

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 649A (Observation = 4.3 °C) (Corr. Factor -0.3 °C) (Final = 4.9 °C)

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: UPS

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤0°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
 Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(0251,552), 505, SPME, @CHI, 532LCMS, 556, 530, AnatoxIn, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	Samp ID	Bottle #	None/<6 mm	Samp ID	Bottle #	None/<6 mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: <u>Yanni</u>	PRINT NAME: <u>Yanni</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>8-13-20</u>	TIME: <u>1351</u>
---------------------------	--------------------------	---	----------------------	-------------------

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 887122
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

8/21:537.1 -0374:IS (13C-PFOA) area count compared to most recent continuing calibration standard, 155.7% failed high. Method limit is 70-140%. Sample was used as batch duplicate and duplicate had similar result confirming matrix interference. Flagged affected analytes E6.All other batch QC, LCS, MRL Check, MS, and MBLK passed method requirements.Result not valid for compliance.

Flags Legend:

E6 - Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/20/2020 17:39	Perfluorohexanoic acid (PFHxA)	202008130378 IX-2-20200813	0.0024		ug/L	0.0020
08/20/2020 17:49	Perfluorohexanoic acid (PFHxA)	202008130379 IX-3-20200813	0.0030		ug/L	0.0020
08/20/2020 17:59	Perfluorohexanoic acid (PFHxA)	202008130380 IX-4-20200813	0.0022		ug/L	0.0020
08/20/2020 14:39	Alkalinity in CaCO3 units	202008130382 LH-INF-20200813	200		mg/L	2.0
08/13/2020 21:15	Chloride		110	250	mg/L	2.5
08/13/2020 21:15	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
08/13/2020 21:15	Nitrate as NO3 (calc)		12	45	mg/L	2.2
08/20/2020 18:08	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
08/20/2020 18:08	Perfluorohexanesulfonic acid (PFHxS)		0.0061		ug/L	0.0020
08/20/2020 18:08	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
08/20/2020 18:08	Perfluorononanoic acid (PFNA)		0.0033		ug/L	0.0020
08/20/2020 18:08	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
08/20/2020 18:08	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
08/13/2020 21:15	Sulfate		180	250	mg/L	2.5
08/13/2020 21:15	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
08/19/2020 15:02	Total Organic Carbon		0.76		mg/L	0.30
08/17/2020 23:52	Perfluorohexanoic acid (PFHxA)	202008130387 IX-5-20200813	0.0020		ug/L	0.0020
08/18/2020 00:02	Perfluorohexanoic acid (PFHxA)	202008130388 IX-6-20200813	0.0039		ug/L	0.0020
08/18/2020 00:11	Perfluorohexanoic acid (PFHxA)	202008130389 IX-7-20200813	0.0050		ug/L	0.0020
08/18/2020 00:32	Perfluorohexanoic acid (PFHxA)	202008130390 IX-8-20200813	0.0044		ug/L	0.0020
08/25/2020 19:13	Alkalinity in CaCO3 units	202008130391 MB-INF-20200813	170		mg/L	2.0
08/13/2020 20:36	Chloride		51	250	mg/L	2.5
08/13/2020 20:36	Nitrate as Nitrogen by IC		2.5	10	mg/L	0.50
08/13/2020 20:36	Nitrate as NO3 (calc)		11	45	mg/L	2.2
08/20/2020 18:46	Perfluorobutanesulfonic acid (PFBS)		0.0088		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/20/2020 18:46	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
08/20/2020 18:46	Perfluorohexanesulfonic acid (PFHxS)		0.0061		ug/L	0.0020
08/20/2020 18:46	Perfluorohexanoic acid (PFHxA)		0.0051		ug/L	0.0020
08/20/2020 18:46	Perfluorononanoic acid (PFNA)		0.0038		ug/L	0.0020
08/20/2020 18:46	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
08/20/2020 18:46	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
08/13/2020 20:36	Sulfate		79	250	mg/L	2.5
08/13/2020 20:36	Total Nitrate, Nitrite-N, CALC		2.5		mg/L	0.10
08/19/2020 15:24	Total Organic Carbon		0.86		mg/L	0.30
	202008130392	<u>MB-INF-DUP-20200813</u>				
08/20/2020 18:56	Perfluorobutanesulfonic acid (PFBS)		0.0089		ug/L	0.0020
08/20/2020 18:56	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
08/20/2020 18:56	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
08/20/2020 18:56	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
08/20/2020 18:56	Perfluorononanoic acid (PFNA)		0.0039		ug/L	0.0020
08/20/2020 18:56	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
08/20/2020 18:56	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020

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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200813 (202008130373)					Sampled on 08/13/2020 0833				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	13C2-PFDA	109	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	13C2-PFHxA	110	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	102	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	96	%		1
08/19/20	08/20/20 15:35	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	118	%		1

GAC-2-20200813 (202008130374)					Sampled on 08/13/2020 0836				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND (E6)	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND (E6)	ug/L	0.0050	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND (E6)	ug/L	0.0020	1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	13C2-PFDA	86	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	13C2-PFHxA	95	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	148	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	84	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	95	%		1
08/19/20	08/20/20 15:54	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	116	%		1

GAC-3-20200813 (202008130375)

Sampled on 08/13/2020 0839

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	13C2-PFDA	110	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	13C2-PFHxA	110	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	103	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	97	%		1
08/19/20	08/20/20 17:01	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	116	%		1

GAC-4-20200813 (202008130376)

Sampled on 08/13/2020 0842

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	13C2-PFDA	105	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	13C2-PFHxA	107	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	129	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	97	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	99	%		1
08/19/20	08/20/20 17:11	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	118	%		1

IX-1-20200813 (202008130377)

Static ID: 537.1

Sampled on 08/13/2020 0845

EPA 537.1 - EPA Method 537.1

08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	13C2-PFDA	112	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	13C2-PFHxA	116	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	104	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	98	%		1
08/19/20	08/20/20 17:20	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	116	%		1

IX-2-20200813 (202008130378)

Sampled on 08/13/2020 0848

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	13C2-PFDA	109	%		1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	13C2-PFHxA	111	%		1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	102	%		1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	98	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:39	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	113	%		1
IX-3-20200813 (202008130379)						Sampled on 08/13/2020 0851			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	13C2-PFDA	96	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	13C2-PFHxA	102	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	137	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	92	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	99	%		1
08/19/20	08/20/20 17:49	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	111	%		1

IX-4-20200813 (202008130380)						Sampled on 08/13/2020 0854			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	13C2-PFDA	106	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	13C2-PFHxA	110	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	128	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	101	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	100	%		1
08/19/20	08/20/20 17:59	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	114	%		1

LH-INF-20200813 (202008130382)

Sampled on 08/13/2020 0857

SM 5310C - Total Organic Carbon

08/19/20 15:02	1269186	(SM 5310C)	Total Organic Carbon	0.76	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

08/13/20 21:15	1268263	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
08/13/20 21:15	1268263	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
08/13/20 21:15	1268263	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/13/20 21:15	1268263	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

08/13/20 21:15	1268298	(EPA 300.0)	Chloride	110	mg/L	2.5	5
08/13/20 21:15	1268298	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0061	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0033	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	13C2-PFDA	111	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	13C2-PFHxA	112	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	128	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	97	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	102	%		1
08/19/20	08/20/20 18:08	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	111	%		1

SM 2320B - Alkalinity in CaCO3 units

08/20/20 14:39	1269807	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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GAC-5-20200813 (202008130383)

Sampled on 08/13/2020 1033

EPA 537.1 - EPA Method 537.1

08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	13C2-PFDA	100	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	13C2-PFHxA	103	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	136	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	91	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	102	%		1
08/19/20	08/20/20 18:18	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	116	%		1

GAC-6-20200813 (202008130384)

Sampled on 08/13/2020 1036

EPA 537.1 - EPA Method 537.1

08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	13C2-PFDA	103	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	13C2-PFHxA	103	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	134	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	92	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	99	%		1
08/19/20	08/20/20 18:27	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	112	%		1

GAC-7-20200813 (202008130385)

Sampled on 08/13/2020 1039

EPA 537.1 - EPA Method 537.1

08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	13C2-PFDA	89	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	13C2-PFHxA	91	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	145	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	81	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	98	%		1
08/19/20	08/20/20 18:37	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	109	%		1

GAC-8-20200813 (202008130386)

Sampled on 08/13/2020 1042

EPA 537.1 - EPA Method 537.1

08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	13C2-PFDA	107	%		1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	13C2-PFHxA	107	%		1

Rounding on totals after summation.
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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	13C3-HFPO-DA	104	%		1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	d3-NMeFOSAA	102	%		1
08/14/20	08/17/20 23:43	1268514	1268993	(EPA 537.1)	d5-NEtFOSAA	107	%		1

IX-5-20200813 (202008130387)

Sampled on 08/13/2020 1045

EPA 537.1 - EPA Method 537.1

08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	13C2-PFDA	118	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	13C2-PFHxA	112	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	13C3-HFPO-DA	113	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	d3-NMeFOSAA	101	%		1
08/14/20	08/17/20 23:52	1268514	1268993	(EPA 537.1)	d5-NEtFOSAA	113	%		1

IX-6-20200813 (202008130388)

Sampled on 08/13/2020 1048

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	13C2-PFDA	117	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	13C2-PFHxA	112	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	13C3-HFPO-DA	114	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	d3-NMeFOSAA	100	%		1
08/14/20	08/18/20 00:02	1268514	1268993	(EPA 537.1)	d5-NEtFOSAA	114	%		1

IX-7-20200813 (202008130389)

Sampled on 08/13/2020 1051

EPA 537.1 - EPA Method 537.1									
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	11-chloro-eicos-afluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0050	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	13C2-PFDA	123	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	13C2-PFHxA	118	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	13C3-HFPO-DA	121	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	d3-NMeFOSAA	101	%		1
08/14/20	08/18/20 00:11	1268514	1268993	(EPA 537.1)	d5-NEtFOSAA	115	%		1

IX-8-20200813 (202008130390)

Sampled on 08/13/2020 1054

EPA 537.1 - EPA Method 537.1

08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

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 1 800 566 LABS (1 800 566 5227)

Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0044	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	13C2-PFDA	116	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	13C2-PFHxA	113	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	13C3-HFPO-DA	114	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	d3-NMeFOSAA	98	%		1
08/14/20	08/18/20 00:32	1268514	1268993	(EPA 537.1)	d5-NEtFOSAA	115	%		1

MB-INF-20200813 (202008130391)

Sampled on 08/13/2020 1057

SM 5310C - Total Organic Carbon

08/19/20 15:24	1269186	(SM 5310C)	Total Organic Carbon	0.86	mg/L	0.30	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

08/13/20 20:36	1268263	(EPA 300.0)	Nitrate as Nitrogen by IC	2.5	mg/L	0.50	5
08/13/20 20:36	1268263	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
08/13/20 20:36	1268263	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/13/20 20:36	1268263	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.5	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

08/13/20 20:36	1268298	(EPA 300.0)	Chloride	51	mg/L	2.5	5
08/13/20 20:36	1268298	(EPA 300.0)	Sulfate	79	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0088	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0061	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0051	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0038	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	13C2-PFDA	112	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	13C2-PFHxA	109	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	126	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	115	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	109	%		1
08/19/20	08/20/20 18:46	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	109	%		1

SM 2320B - Alkalinity in CaCO3 units

08/25/20 19:13	1270621	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
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MB-INF-DUP-20200813 (202008130392)

Sampled on 08/13/2020 1100

EPA 537.1 - EPA Method 537.1

08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0089	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 887122
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Water Replenishment District
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 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0039	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	13C2-PFDA	115	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	13C2-PFHxA	108	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/19/20	08/20/20 18:56	1269395	1268915	(EPA 537.1)	d5-NEtFOSAA	114	%		1

FB-HOLD-20200813 (202008130393)

Sampled on 08/13/2020 0900

EPA 537.1 - EPA Method 537.1

08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 887122
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/13/2020 1157

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	13C2-PFDA	104	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	13C2-PFHxA	106	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	13C3-HFPO-DA	101	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	d3-NMeFOSAA	100	%		1
08/19/20	08/20/20 17:39	1268848	1269962	(EPA 537.1)	d5-NEtFOSAA	111	%		1

Rounding on totals after summation.
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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1268263

202008130382 LH-INF-20200813
 202008130391 MB-INF-20200813

Analysis Date: 08/13/2020

Analyzed by: B9PD
 Analyzed by: B9PD

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1268298

202008130382 LH-INF-20200813
 202008130391 MB-INF-20200813

Analysis Date: 08/13/2020

Analyzed by: B9PD
 Analyzed by: B9PD

EPA Method 537.1

Prep Batch: 1269395 Analytical Batch: 1268915

202008130373 GAC-1-20200813
 202008130374 GAC-2-20200813
 202008130375 GAC-3-20200813
 202008130376 GAC-4-20200813
 202008130377 IX-1-20200813
 202008130378 IX-2-20200813
 202008130379 IX-3-20200813
 202008130380 IX-4-20200813
 202008130382 LH-INF-20200813
 202008130383 GAC-5-20200813
 202008130384 GAC-6-20200813
 202008130385 GAC-7-20200813
 202008130391 MB-INF-20200813
 202008130392 MB-INF-DUP-20200813

Analysis Date: 08/20/2020

Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
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 Analyzed by: Y7BM
 Analyzed by: Y7BM

EPA Method 537.1

Prep Batch: 1268514 Analytical Batch: 1268993

202008130386 GAC-8-20200813
 202008130387 IX-5-20200813
 202008130388 IX-6-20200813
 202008130389 IX-7-20200813
 202008130390 IX-8-20200813

Analysis Date: 08/17/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

Total Organic Carbon

Analytical Batch: 1269186

202008130382 LH-INF-20200813
 202008130391 MB-INF-20200813

Analysis Date: 08/19/2020

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

Alkalinity in CaCO3 units

Analytical Batch: 1269807

202008130382 LH-INF-20200813

Analysis Date: 08/20/2020

Analyzed by: ZS6I

EPA Method 537.1

Prep Batch: 1268848 Analytical Batch: 1269962

202008130393 FB-HOLD-20200813

Analysis Date: 08/20/2020

Analyzed by: KAM

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Report: 887122
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Alkalinity in CaCO₃ units**Analytical Batch: 1270621**

202008130391

MB-INF-20200813

Analysis Date: 08/25/2020

Analyzed by: ZS6I

Tel: (626) 386-1100
 Fax: (626) 988-3757
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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1268263					Analysis Date: 08/13/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.60	mg/L	104	(90-110)	20	0.38
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0482	mg/L	96	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0172	mg/L	138	(50-150)		
MS_202008130294	Nitrate as Nitrogen by IC	2.4	6.5	9.31	mg/L	110	(80-120)		
MS_202008130391	Nitrate as Nitrogen by IC	2.5	6.5	9.40	mg/L	110	(80-120)		
MSD_202008130294	Nitrate as Nitrogen by IC	2.4	6.5	9.22	mg/L	109	(80-120)	20	0.94
MSD_202008130391	Nitrate as Nitrogen by IC	2.5	6.5	9.32	mg/L	109	(80-120)	20	0.81
LCS1	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0527	mg/L	105	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0133	mg/L	106	(50-150)		
MS_202008130294	Nitrite Nitrogen by IC	ND	2.5	2.53	mg/L	101	(80-120)		
MS_202008130391	Nitrite Nitrogen by IC	ND	2.5	2.67	mg/L	107	(80-120)		
MSD_202008130294	Nitrite Nitrogen by IC	ND	2.5	2.48	mg/L	99	(80-120)	20	1.9
MSD_202008130391	Nitrite Nitrogen by IC	ND	2.5	2.65	mg/L	106	(80-120)	20	0.76
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1268298					Analysis Date: 08/13/2020				
LCS1	Chloride		25	27.0	mg/L	108	(90-110)		
LCS2	Chloride		25	27.0	mg/L	108	(90-110)	20	0.37
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.458	mg/L	92	(50-150)		
MS_202008130294	Chloride	190	62.5	ND	mg/L				
MS_202008130391	Chloride	51	65	125	mg/L	119	(80-120)		
MSD_202008130294	Chloride	190	62.5	ND	mg/L				
MSD_202008130391	Chloride	51	65	124	mg/L	117	(80-120)	20	0.78
LCS1	Sulfate		50	53.3	mg/L	107	(90-110)		
LCS2	Sulfate		50	53.3	mg/L	107	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.02	mg/L	102	(50-150)		
MRL_W	Sulfate		0.25	0.270	mg/L	108	(50-150)		
MS_202008130294	Sulfate	230	125	367	mg/L	113	(80-120)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008130391	Sulfate	79	125	222	mg/L	114	(80-120)		
MSD_202008130294	Sulfate	230	125	365	mg/L	111	(80-120)	20	0.66
MSD_202008130391	Sulfate	79	125	220	mg/L	113	(80-120)	20	0.72

EPA Method 537.1 by EPA 537.1

Prep Batch: 1269395 Analytical Batch: 1268915

Analysis Date: 08/20/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008130374	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0413	ug/L	88	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0431	ug/L	92	(70-130)	30	4.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00160	ug/L	85	(50-150)		
MS_202008130373	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00168	ug/L	89	(50-150)		
DUP_202008130374	13C2-PFDA (S)			95.3	%	95	(70-130)		
LCS3	13C2-PFDA (S)		100	119	%	119	(70-130)		
LCS4	13C2-PFDA (S)		100	118	%	119	(70-130)		
MBLK	13C2-PFDA (S)			121	%	121	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	115	%	115	(70-130)		
MS_202008130373	13C2-PFDA (S)		100	113	%	113	(70-130)		
DUP_202008130374	13C2-PFHxA (S)			99.5	%	100	(70-130)		
LCS3	13C2-PFHxA (S)		100	123	%	123	(70-130)		
LCS4	13C2-PFHxA (S)		100	126	%	126	(70-130)		
MBLK	13C2-PFHxA (S)			124	%	124	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	120	%	120	(70-130)		
MS_202008130373	13C2-PFHxA (S)		100	117	%	117	(70-130)		
DUP_202008130374	13C2-PFOA- IS#1 (I)			138	%	138	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.3	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			106	%	106	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	98.7	%	99	(50-150)		
MS_202008130373	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
DUP_202008130374	13C3-HFPO-DA (S)			90.2	%	90	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	114	%	114	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	118	%	119	(70-130)		
MBLK	13C3-HFPO-DA (S)			112	%	112	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
MS_202008130373	13C3-HFPO-DA (S)		100	106	%	107	(70-130)		
DUP_202008130374	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	98.4	%	98	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	13C4-PFOS- IS#2 (I)		100	98.9	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.1	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.4	%	98	(50-150)		
MS_202008130373	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
DUP_202008130374	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0474	ug/L	98	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0490	ug/L	101	(70-130)	30	3.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00205	ug/L	108	(50-150)		
MS_202008130373	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00203	ug/L	107	(50-150)		
DUP_202008130374	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0456	ug/L	98	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0474	ug/L	102	(70-130)	30	3.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00189	ug/L	101	(50-150)		
MS_202008130373	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00192	ug/L	103	(50-150)		
DUP_202008130374	d3-NMeFOSAA (I)			97.3	%	97	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	86.0	%	86	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	91.4	%	91	(50-150)		
MBLK	d3-NMeFOSAA (I)			85.5	%	85	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	82.8	%	83	(50-150)		
MS_202008130373	d3-NMeFOSAA (I)		100	94.6	%	95	(50-150)		
DUP_202008130374	d5-NEtFOSAA (S)			116	%	116	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	113	%	113	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	117	%	117	(70-130)		
MBLK	d5-NEtFOSAA (S)			124	%	125	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	118	%	118	(70-130)		
MS_202008130373	d5-NEtFOSAA (S)		100	115	%	115	(70-130)		
DUP_202008130374	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0498	ug/L	100	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0494	ug/L	99	(70-130)	30	0.81
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202008130373	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00198	ug/L	98	(50-150)		
DUP_202008130374	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0490	ug/L	98	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0502	ug/L	100	(70-130)	30	2.4
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00207	ug/L	103	(50-150)		
MS_202008130373	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00207	ug/L	104	(50-150)		
DUP_202008130374	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0482	ug/L	96	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0503	ug/L	101	(70-130)	30	4.3
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00213	ug/L	106	(50-150)		
MS_202008130373	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00203	ug/L	100	(50-150)		
DUP_202008130374	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0429	ug/L	97	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0458	ug/L	103	(70-130)	30	6.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00184	ug/L	104	(50-150)		
MS_202008130373	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00182	ug/L	103	(50-150)		
DUP_202008130374	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0484	ug/L	97	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0500	ug/L	100	(70-130)	30	3.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202008130373	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00202	ug/L	100	(50-150)		
DUP_202008130374	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0489	ug/L	98	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0483	ug/L	97	(70-130)	30	1.2
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00195	ug/L	98	(50-150)		
MS_202008130373	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00184	ug/L	91	(50-150)		
DUP_202008130374	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0527	ug/L	105	(70-130)	30	1.7
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00215	ug/L	108	(50-150)		
MS_202008130373	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00222	ug/L	110	(50-150)		
DUP_202008130374	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0447	ug/L	98	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0469	ug/L	103	(70-130)	30	4.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00191	ug/L	105	(50-150)		
MS_202008130373	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00199	ug/L	109	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008130374	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0501	ug/L	100	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0519	ug/L	104	(70-130)	30	3.5
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202008130373	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00216	ug/L	105	(50-150)		
DUP_202008130374	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0502	ug/L	100	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0512	ug/L	102	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00215	ug/L	108	(50-150)		
MS_202008130373	Perfluorononanoic acid (PFNA)	ND	0.002	0.00218	ug/L	109	(50-150)		
DUP_202008130374	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0453	ug/L	98	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0474	ug/L	102	(70-130)	30	4.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00200	ug/L	108	(50-150)		
MS_202008130373	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00207	ug/L	98	(50-150)		
DUP_202008130374	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0507	ug/L	101	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0522	ug/L	104	(70-130)	30	2.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202008130373	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00226	ug/L	107	(50-150)		
DUP_202008130374	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0520	ug/L	104	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0536	ug/L	107	(70-130)	30	3.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00201	ug/L	100	(50-150)		
MS_202008130373	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00223	ug/L	110	(50-150)		
DUP_202008130374	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0476	ug/L	95	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0482	ug/L	96	(70-130)	30	1.3
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00184	ug/L	92	(50-150)		
MS_202008130373	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00182	ug/L	91	(50-150)		
DUP_202008130374	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0485	ug/L	97	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0490	ug/L	98	(70-130)	30	1.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00199	ug/L	99	(50-150)		
MS_202008130373	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00198	ug/L	99	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1268514 Analytical Batch: 1268993

Analysis Date: 08/17/2020

DUP_202008130757	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0240	ug/L	102	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0268	ug/L	114	(70-130)	30	11
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00204	ug/L	108	(50-150)		
MS_202008130755	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00198	ug/L	105	(50-150)		
DUP_202008130757	13C2-PFDA (S)			114	%	114	(70-130)		
LCS1	13C2-PFDA (S)		100	110	%	110	(70-130)		
LCS2	13C2-PFDA (S)		100	113	%	113	(70-130)		
MBLK	13C2-PFDA (S)			113	%	113	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	112	%	112	(70-130)		
MS_202008130755	13C2-PFDA (S)		100	114	%	114	(70-130)		
DUP_202008130757	13C2-PFHxA (S)			111	%	111	(70-130)		
LCS1	13C2-PFHxA (S)		100	106	%	106	(70-130)		
LCS2	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MBLK	13C2-PFHxA (S)			109	%	109	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	109	%	109	(70-130)		
MS_202008130755	13C2-PFHxA (S)		100	113	%	113	(70-130)		
DUP_202008130757	13C2-PFOA- IS#1 (I)			97.8	%	98	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	97.7	%	98	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	96.7	%	97	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			97.7	%	98	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MS_202008130755	13C2-PFOA- IS#1 (I)		100	95.7	%	96	(50-150)		
DUP_202008130757	13C3-HFPO-DA (S)			111	%	111	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
MBLK	13C3-HFPO-DA (S)			106	%	106	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
MS_202008130755	13C3-HFPO-DA (S)		100	111	%	111	(70-130)		
DUP_202008130757	13C4-PFOS- IS#2 (I)			98.5	%	98	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	13C4-PFOS- IS#2 (I)		100	97.8	%	98	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	95.1	%	95	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.9	%	97	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MS_202008130755	13C4-PFOS- IS#2 (I)		100	96.2	%	96	(50-150)		
DUP_202008130757	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0238	ug/L	101	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0273	ug/L	116	(70-130)	30	14
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00212	ug/L	112	(50-150)		
MS_202008130755	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00205	ug/L	108	(50-150)		
DUP_202008130757	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0236	ug/L	101	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0264	ug/L	113	(70-130)	30	11
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00204	ug/L	110	(50-150)		
MS_202008130755	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00194	ug/L	104	(50-150)		
DUP_202008130757	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	98.0	%	98	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			100	%	100	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS_202008130755	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
DUP_202008130757	d5-NEtFOSAA (S)			107	%	107	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MBLK	d5-NEtFOSAA (S)			106	%	106	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MS_202008130755	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
DUP_202008130757	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0273	ug/L	109	(70-130)	30	12
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00213	ug/L	107	(50-150)		
MS_202008130755	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202008130757	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0246	ug/L	98	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)	30	11

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00224	ug/L	112	(50-150)		
MS_202008130755	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00208	ug/L	104	(50-150)		
DUP_202008130757	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0249	ug/L	100	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0267	ug/L	107	(70-130)	30	7.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00219	ug/L	109	(50-150)		
MS_202008130755	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00206	ug/L	103	(50-150)		
DUP_202008130757	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0209	ug/L	95	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0233	ug/L	105	(70-130)	30	11
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00190	ug/L	108	(50-150)		
MS_202008130755	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00187	ug/L	106	(50-150)		
DUP_202008130757	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0251	ug/L	100	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0292	ug/L	117	(70-130)	30	15
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202008130755	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00223	ug/L	112	(50-150)		
DUP_202008130757	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0289	ug/L	116	(70-130)	30	15
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00229	ug/L	115	(50-150)		
MS_202008130755	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00214	ug/L	107	(50-150)		
DUP_202008130757	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0294	ug/L	118	(70-130)	30	12
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00238	ug/L	119	(50-150)		
MS_202008130755	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00228	ug/L	113	(50-150)		
DUP_202008130757	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0230	ug/L	101	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0260	ug/L	114	(70-130)	30	12
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00207	ug/L	113	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008130755	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00201	ug/L	110	(50-150)		
DUP_202008130757	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0277	ug/L	111	(70-130)	30	10
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202008130755	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00224	ug/L	109	(50-150)		
DUP_202008130757	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0256	ug/L	102	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0288	ug/L	115	(70-130)	30	12
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00250	ug/L	125	(50-150)		
MS_202008130755	Perfluorononanoic acid (PFNA)	ND	0.002	0.00222	ug/L	111	(50-150)		
DUP_202008130757	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0236	ug/L	102	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0262	ug/L	113	(70-130)	30	10
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00228	ug/L	123	(50-150)		
MS_202008130755	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00199	ug/L	104	(50-150)		
DUP_202008130757	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0294	ug/L	118	(70-130)	30	13
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00262	ug/L	131	(50-150)		
MS_202008130755	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00230	ug/L	111	(50-150)		
DUP_202008130757	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0287	ug/L	115	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0320	ug/L	128	(70-130)	30	11
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00283	ug/L	142	(50-150)		
MS_202008130755	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00256	ug/L	116	(50-150)		
DUP_202008130757	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0299	ug/L	120	(70-130)	30	11
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00245	ug/L	122	(50-150)		
MS_202008130755	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00228	ug/L	114	(50-150)		
DUP_202008130757	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0261	ug/L	104	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0295	ug/L	118	(70-130)	30	12
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202008130755	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00220	ug/L	110	(50-150)		

Total Organic Carbon by SM 5310C

Analytical Batch: 1269186

Analysis Date: 08/19/2020

LCS1	Total Organic Carbon		5	5.46	mg/L	109	(90-110)		
LCS2	Total Organic Carbon		5	5.48	mg/L	110	(90-110)	20	0.55
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.255	mg/L	127	(50-150)		
MS_202008130594	Total Organic Carbon	3.7	4	8.22	mg/L	114	(80-120)		
MS2_202008130391	Total Organic Carbon	0.86	2	3.10	mg/L	112	(80-120)		
MSD_202008130594	Total Organic Carbon	3.7	4	8.20	mg/L	113	(80-120)	20	0.24
MSD2_202008130391	Total Organic Carbon	0.86	2	3.09	mg/L	111	(80-120)	20	0.32

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1269807

Analysis Date: 08/20/2020

LCS1	Alkalinity in CaCO3 units		100	102	mg/L	102	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.7	mg/L	100	(90-110)	20	2.3
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.03	mg/L	101	(50-150)		
MS_202008140499	Alkalinity in CaCO3 units	120	100	151	mg/L	<u>29</u>	(80-120)		
MS_202008180129	Alkalinity in CaCO3 units	70	100	170	mg/L	100	(80-120)		
MSD_202008140499	Alkalinity in CaCO3 units	120	100	147	mg/L	<u>26</u>	(80-120)	20	2.7
MSD_202008180129	Alkalinity in CaCO3 units	70	100	169	mg/L	99	(80-120)	20	0.40

EPA Method 537.1 by EPA 537.1

Prep Batch: 1268848 Analytical Batch: 1269962

Analysis Date: 08/20/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0250	ug/L	106	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)	30	5.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS_202007210460	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00192	ug/L	102	(50-150)		
MSD_202007210460	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00190	ug/L	101	(50-150)	50	0.32
LCS1	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS2	13C2-PFDA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C2-PFDA (S)		100	101	%	101	(70-130)		
MS_202007210460	13C2-PFDA (S)		100	107	%	107	(70-130)		
MSD_202007210460	13C2-PFDA (S)		100	103	%	103	(70-130)		
LCS1	13C2-PFHxA (S)		100	112	%	112	(70-130)		
LCS2	13C2-PFHxA (S)		100	109	%	109	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MS_202007210460	13C2-PFHxA (S)		100	114	%	114	(70-130)		
MSD_202007210460	13C2-PFHxA (S)		100	111	%	111	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	98.4	%	98	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	99.4	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.3	%	98	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS_202007210460	13C2-PFOA- IS#1 (I)		100	95.3	%	95	(50-150)		
MSD_202007210460	13C2-PFOA- IS#1 (I)		100	97.0	%	97	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	110	%	110	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
MBLK	13C3-HFPO-DA (S)			107	%	107	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS_202007210460	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MSD_202007210460	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	97.1	%	97	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	99.2	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.6	%	99	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	96.9	%	97	(50-150)		
MS_202007210460	13C4-PFOS- IS#2 (I)		100	97.6	%	98	(50-150)		
MSD_202007210460	13C4-PFOS- IS#2 (I)		100	97.0	%	97	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0254	ug/L	107	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0249	ug/L	106	(70-130)	30	2.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00206	ug/L	109	(50-150)		
MS_202007210460	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00209	ug/L	111	(50-150)		
MSD_202007210460	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00227	ug/L	120	(50-150)	50	8.2
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0237	ug/L	102	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0228	ug/L	98	(70-130)	30	3.9
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00190	ug/L	102	(50-150)		
MS_202007210460	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00186	ug/L	100	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202007210460	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00174	ug/L	94	(50-150)	50	5.8
LCS1	d3-NMeFOSAA (I)		100	96.2	%	96	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	95.4	%	95	(50-150)		
MBLK	d3-NMeFOSAA (I)			96.9	%	97	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	95.5	%	95	(50-150)		
MS_202007210460	d3-NMeFOSAA (I)		100	96.4	%	96	(50-150)		
MSD_202007210460	d3-NMeFOSAA (I)		100	96.1	%	96	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MBLK	d5-NEtFOSAA (S)			104	%	105	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	106	%	107	(70-130)		
MS_202007210460	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MSD_202007210460	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0253	ug/L	101	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0243	ug/L	97	(70-130)	30	4.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00197	ug/L	99	(50-150)		
MS_202007210460	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00202	ug/L	101	(50-150)		
MSD_202007210460	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00213	ug/L	107	(50-150)	50	5.1
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0258	ug/L	103	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0256	ug/L	102	(70-130)	30	0.78
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00214	ug/L	107	(50-150)		
MS_202007210460	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00197	ug/L	98	(50-150)		
MSD_202007210460	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00202	ug/L	101	(50-150)	50	2.7
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0258	ug/L	103	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0258	ug/L	103	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00202	ug/L	101	(50-150)		
MS_202007210460	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00203	ug/L	101	(50-150)		
MSD_202007210460	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00207	ug/L	104	(50-150)	50	2.0
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0240	ug/L	108	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0234	ug/L	106	(70-130)	30	2.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00191	ug/L	108	(50-150)		
MS_202007210460	Perfluorobutanesulfonic acid (PFBS)	0.0020	0.0018	0.00390	ug/L	105	(50-150)		
MSD_202007210460	Perfluorobutanesulfonic acid (PFBS)	0.0020	0.0018	0.00395	ug/L	108	(50-150)	50	1.4
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0252	ug/L	101	(70-130)		

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0242	ug/L	97	(70-130)	30	4.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00192	ug/L	96	(50-150)		
MS_202007210460	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00206	ug/L	103	(50-150)		
MSD_202007210460	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00192	ug/L	96	(50-150)	50	7.0
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0238	ug/L	95	(70-130)	30	6.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00188	ug/L	94	(50-150)		
MS_202007210460	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00196	ug/L	98	(50-150)		
MSD_202007210460	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00190	ug/L	95	(50-150)	50	2.7
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0265	ug/L	106	(70-130)	30	2.6
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202007210460	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00308	ug/L	118	(50-150)		
MSD_202007210460	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00293	ug/L	110	(50-150)	50	5.2
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0243	ug/L	107	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0237	ug/L	104	(70-130)	30	2.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00197	ug/L	108	(50-150)		
MS_202007210460	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00210	ug/L	105	(50-150)		
MSD_202007210460	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00213	ug/L	107	(50-150)	50	1.6
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0259	ug/L	104	(70-130)	30	4.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00219	ug/L	110	(50-150)		
MS_202007210460	Perfluorohexanoic acid (PFHxA)	0.0048	0.002	0.00684	ug/L	103	(50-150)		
MSD_202007210460	Perfluorohexanoic acid (PFHxA)	0.0048	0.002	0.00671	ug/L	96	(50-150)	50	1.9
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0263	ug/L	105	(70-130)	30	0.38
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202007210460	Perfluorononanoic acid (PFNA)	ND	0.002	0.00218	ug/L	109	(50-150)		
MSD_202007210460	Perfluorononanoic acid (PFNA)	ND	0.002	0.00207	ug/L	104	(50-150)	50	5.1
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0244	ug/L	106	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0234	ug/L	101	(70-130)	30	4.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 887122
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00192	ug/L	104	(50-150)		
MS_202007210460	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00199	ug/L	103	(50-150)		
MSD_202007210460	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00196	ug/L	101	(50-150)	50	1.6
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0256	ug/L	102	(70-130)	30	2.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00225	ug/L	112	(50-150)		
MS_202007210460	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00247	ug/L	107	(50-150)		
MSD_202007210460	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00230	ug/L	98	(50-150)	50	7.3
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0290	ug/L	116	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0272	ug/L	109	(70-130)	30	6.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00254	ug/L	127	(50-150)		
MS_202007210460	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00251	ug/L	105	(50-150)		
MSD_202007210460	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00244	ug/L	101	(50-150)	50	2.7
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0249	ug/L	100	(70-130)	30	5.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202007210460	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202007210460	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00204	ug/L	102	(50-150)	50	5.9
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0248	ug/L	99	(70-130)	30	5.9
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00182	ug/L	91	(50-150)		
MS_202007210460	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00192	ug/L	96	(50-150)		
MSD_202007210460	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00196	ug/L	98	(50-150)	50	2.2

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1270621

Analysis Date: 08/25/2020

LCS1	Alkalinity in CaCO3 units		100	99.3	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.5	mg/L	100	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.94	mg/L	97	(50-150)		
MS_202008180455	Alkalinity in CaCO3 units	320	100	386	mg/L	<u>62</u>	(80-120)		
MS_202008190241	Alkalinity in CaCO3 units	230	100	297	mg/L	<u>63</u>	(80-120)		
MSD_202008180455	Alkalinity in CaCO3 units	320	100	391	mg/L	<u>67</u>	(80-120)	20	1.2
MSD_202008190241	Alkalinity in CaCO3 units	230	100	289	mg/L	<u>55</u>	(80-120)	20	2.6

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Fecal Coliform Small, Fecal Coliform Large), MPN/100 mL (Fecal Coliform), Presence/Absence (P/A)* (Fecal Coliform)

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 08/26/2020

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows: P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 08/26/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)* (Total Coliform, E. Coli)

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 08/26/2020

Quant Report - Page 1 of 1

Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 888431
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 888431
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **August 20, 2020 at 1337**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202008200210</u>	GAC-1-20200820 Static ID: 537.1 @537.1	08/20/2020 0833
<u>202008200211</u>	GAC-2-20200820 Static ID: 537.1 @537.1	08/20/2020 0836
<u>202008200212</u>	GAC-3-20200820 Static ID: 537.1 @537.1	08/20/2020 0839
<u>202008200213</u>	GAC-4-20200820 Static ID: 537.1 @537.1	08/20/2020 0842
<u>202008200214</u>	IX-1-20200820 Static ID: 537.1 @537.1	08/20/2020 0845
<u>202008200215</u>	IX-2-20200820 Static ID: 537.1 @537.1	08/20/2020 0848
<u>202008200216</u>	IX-3-20200820 Static ID: 537.1 @537.1	08/20/2020 0851
<u>202008200217</u>	IX-4-20200820 Static ID: 537.1 @537.1	08/20/2020 0854
<u>202008200220</u>	LH-INF-20200820 @ICP Uranium by ICPMS as pCi/L @VOASDWA Chloride Magnesium Total ICAP Perchlorate Sulfate Total Suspended Solids (TSS)	08/20/2020 0857 @ICPMS @ANIONS48 Calcium Total ICAP Iron Total ICAP Oil and Grease by 1664(subbed) Sodium Total ICAP Total Organic Carbon

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 888431
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **August 20, 2020 at 1337**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202008200228</u>	GAC-5-20200820	08/20/2020 1033
	@537.1	
<u>202008200229</u>	GAC-6-20200820	08/20/2020 1036
	@537.1	
<u>202008200230</u>	GAC-7-20200820	08/20/2020 1039
	@537.1	
<u>202008200231</u>	GAC-8-20200820	08/20/2020 1042
	@537.1	
<u>202008200232</u>	IX-5-20200820	08/20/2020 1045
	@537.1	
<u>202008200233</u>	IX-6-20200820	08/20/2020 1048
	@537.1	
<u>202008200234</u>	IX-7-20200820	08/20/2020 1051
	@537.1	
<u>202008200235</u>	IX-8-20200820	08/20/2020 1054
	@537.1	
<u>202008200236</u>	MB-INF-20200820	08/20/2020 1057
	@ICP	Total Hardness as CaCO3 by ICP
	Uranium by ICPMS as pCi/L	@537.1
	@VOASDWA	Alkalinity in CaCO3 units
	Chloride	Hexavalent chromium(Dissolved)
	Magnesium Total ICAP	Manganese Total ICAP/MS
	Perchlorate	Potassium Total ICAP
	Sulfate	Total Dissolved Solid (TDS)
	Total Suspended Solids (TSS)	
	@ICPMS	
	@ANIONS48	
	Calcium Total ICAP	
	Iron Total ICAP	
	Oil and Grease by 1664(subbed)	
	Sodium Total ICAP	
	Total Organic Carbon	
<u>202008200237</u>	FB-HOLD-20200820	08/20/2020 1100
	@537.1 FB	

Test Description

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 888431
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **August 20, 2020** at **1337**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@ICP -- ICP Metals	
	@ICPMS -- ICPMS Metals	
	@537.1 -- EPA Method 537.1	
	@537.1 FB -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	
	@VOASDWA -- Volatile Organics by GCMS	

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070			PROJECT NAME: WRD Pilot			PROJECT NO.: 5302												
TEL: (949) 679-1070			E-MAIL: mjeon@gsi-net.com			LAB CONTACT: Sophia Liang												
GLOBAL ID:			PROJECT CONTACT: Miae Jeon			SAMPLER(S): (PRINT) RDT												
LABORATORY: Eurofins Eaton Analytical			REQUESTED ANALYSES Please check box or fill in blank as needed.															
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 72 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD			SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results			PFAS - full list (EPA 537.1) Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) Alkalinity (as CaCO3), (SM 2320B) Uranium, Arsenic, Manganese (EPA 200.8) Perchlorate (EPA 314.0) Hexavalent Chromium (EPA 218.6) Fe, Na, K, Ca, Mg (EPA 200.7) Total Hardness as CaCO3 (SM 2340B) VOCs (EPA 524.2) TOC (SM 5310C) TDS (E160.1/SM 2540C) TSS (SM 2540D) Oil & Grease (EPA 1664)												
LAB USE ONLY			SAMPLE ID		SAMPLING DATE		TIME		MATRIX		NO. OF CONT.		Field Filtered		Unpreserved		Preserved	
GAC-1 - 20200820			8-20		0833		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
GAC-2 - 20200820			8-20		0836		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
GAC-3 - 20200820			8-20		0839		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
GAC-4 - 20200820			8-20		0842		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
IX-1 - 20200820			8-20		0845		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
IX-2 - 20200820			8-20		0848		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
IX-3 - 20200820			8-20		0851		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
IX-4 - 20200820			8-20		0854		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
LH-INF-20200820			8-20		0857		Water		14		<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
LH-INF-DUP			8-20		1033		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
GAC-5 - 20200820			8-20		1036		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
GAC-6 - 20200820			8-20		1039		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
GAC-7 - 20200820			8-20		1042		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
GAC-8 - 20200820			8-20		1042		Water		2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Relinquished by: (Signature) <i>[Signature]</i>			Date: <u>8-20-2020</u>		Time: <u>1336</u>		Received by: (Signature) <i>[Signature]</i>		Date: <u>8-20-2020</u>		Time: <u>1337</u>		Received by: (Signature) <i>[Signature]</i>		Date:		Time:	
Relinquished by: (Signature) <i>[Signature]</i>			Date:		Time:		Received by: (Signature) <i>[Signature]</i>		Date:		Time:		Received by: (Signature) <i>[Signature]</i>		Date:		Time:	

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical			PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:			PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) RDT																	
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD			SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results			REQUESTED ANALYSES Please check box or fill in blank as needed.																	
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preservation		PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)			
		DATE	TIME			Unpreserved	Field Filtered																
	IX-5-20200820	8-20	1045	Water	2	Unpreserved		X															
	IX-6-20200820		1048	Water	2	Unpreserved		X															
	IX-7-20200820		1051	Water	2	Unpreserved		X															
	IX-8-20200820		1054	Water	2	Unpreserved		X															
	MB-INF-20200820		1057	Water	14	Unpreserved		X															
	MB-INF-DUP			Water		Unpreserved																	
	FB-20200820	8-20	1100	Water	1	Unpreserved															X		
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>						Date: 8-20-2020 Time: 1336											
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>						Date: 8-20-20 Time: 1337											
Relinquished by: (Signature)						Received by: (Signature)						Date:											

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

Created Date & Time: 6/12/2020 5:36:13PM

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (866) 988-3757

Kit #: 265925
Created By: Anisha Zachariah - [ZR4B]
Deliver By: 06/23/2020
STG: Bottle Orders
Ice Type: G

Note: Sampler Please return this paper with your samples

Client ID: WRD



Project Code: 0250000 Bottle Orders
Group Name: WRD Pilot[Set#2]
PO#/JOB#:

Description: WRD Pilot[Set#2]
Shipping Method: Pickup by client

Ship Sample Kits to
GSI Environmental Inc.
Attn: Robert Torres
Phone: 951-616-8406

Send Report to
Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712
Attn: Joseph Liles
Phone: 562-275-4226

Billing Address
Water Replenishment District
Attn: Eurofins Calscience
Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712
Attn: Brian Partington
Phone: 562-275-4249
Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
5	1 - 125ml amber glass [0.5 ml H2SO4 (50%)]	5	UN1830
5	@ANIONS48, Chloride, Sulfate	5	
5	1 - 125ml poly [no preservative]	5	
40	1 - 250ml poly [no preservative]	5	
2	2 - 275 ml polypro w polypro cap [1.4 g Trisma]	80	
2	1 - 275 ml polypro w polypro cap [1.4g Trisma + H2O]	2	
2	1 - 275 ml polypro w polypro cap [no preservative]	2	
Sum Tests: 59		Sum Bottles: 99	

Comments

SHIPPING:
- CLIENT PIU TUESDAY, JUNE 23RD MORNING
- PACKAGE IN 4 x 32 QT COOLERS

GSI SAMPLER:
- PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES.
- NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP.

ASM:
•Please also send invoices to Miae Jeon (mjeon@gsi-net.com)
•Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pgalvin@gsi-net.com, and rdtorres@gsi-net.com.

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 855M

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 631 (Observation = 23.0 °C) (Corr. Factor = -0.1 °C) (Final = 22.9 °C)

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: Walk-In

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

- 4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)
- 5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____
- 6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: <u>Chuck Brook</u>	PRINT NAME: <u>Chuck Brook</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>8.20.20</u>	TIME: <u>1337</u>
---------------------------------	--------------------------------	---	----------------------	-------------------

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 888431
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove,
CAELAP 2944 exp 9-30-2020

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202008200215				
		<u>IX-2-20200820</u>				
08/27/2020 18:02	Perfluorohexanoic acid (PFHxA)		0.0027		ug/L	0.0020
		202008200216				
		<u>IX-3-20200820</u>				
08/27/2020 18:12	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
		202008200217				
		<u>IX-4-20200820</u>				
08/27/2020 18:31	Perfluorohexanoic acid (PFHxA)		0.0029		ug/L	0.0020
		202008200220				
		<u>LH-INF-20200820</u>				
08/27/2020 18:18	Alkalinity in CaCO3 units		200		mg/L	2.0
08/25/2020 14:57	Calcium Total ICAP		120		mg/L	10
08/20/2020 18:51	Chloride		110	250	mg/L	2.5
08/25/2020 20:41	Chloroform (Trichloromethane)		0.63		ug/L	0.50
08/27/2020 14:59	Hexavalent chromium(Dissolved)		0.67		ug/L	0.020
08/25/2020 14:57	Magnesium Total ICAP		21		mg/L	1.0
08/20/2020 18:51	Nitrate as Nitrogen by IC		2.9	10	mg/L	0.50
08/20/2020 18:51	Nitrate as NO3 (calc)		13	45	mg/L	2.2
08/27/2020 18:41	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
08/27/2020 18:41	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
08/27/2020 18:41	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
08/27/2020 18:41	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
08/27/2020 18:41	Perfluorooctanesulfonic acid (PFOS)		0.029		ug/L	0.0020
08/27/2020 18:41	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
08/25/2020 14:57	Sodium Total ICAP		74		mg/L	10
08/20/2020 18:51	Sulfate		180	250	mg/L	2.5
08/25/2020 23:14	Total Dissolved Solids (TDS)		660	500	mg/L	10
08/26/2020 11:34	Total Hardness as CaCO3 by ICP (calc)		390		mg/L	3.0
08/20/2020 18:51	Total Nitrate, Nitrite-N, CALC		2.9		mg/L	0.10
08/26/2020 01:00	Total Organic Carbon		0.70		mg/L	0.20
08/25/2020 20:41	Total THM		0.63	80	ug/L	0.50
08/21/2020 21:10	Uranium by ICPMS as pCi/L		3.7		pCi/L	0.70
08/21/2020 20:20	Uranium ICAP/MS		5.6	30	ug/L	1.0
		202008200232				
		<u>IX-5-20200820</u>				
08/27/2020 21:52	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
		202008200233				
		<u>IX-6-20200820</u>				
08/27/2020 22:02	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202008200234				
		<u>IX-7-20200820</u>				
08/27/2020 22:11	Perfluorohexanoic acid (PFHxA)		0.0049		ug/L	0.0020
		202008200235				
		<u>IX-8-20200820</u>				
08/27/2020 22:21	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
		202008200236				
		<u>MB-INF-20200820</u>				
08/27/2020 18:09	Alkalinity in CaCO3 units		170		mg/L	2.0
08/25/2020 14:58	Calcium Total ICAP		62		mg/L	10
08/20/2020 18:38	Chloride		48	250	mg/L	2.5
08/27/2020 15:09	Hexavalent chromium(Dissolved)		0.44		ug/L	0.020
08/25/2020 14:58	Magnesium Total ICAP		12		mg/L	1.0
08/20/2020 18:38	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
08/20/2020 18:38	Nitrate as NO3 (calc)		11	45	mg/L	2.2
08/27/2020 22:30	Perfluorobutanesulfonic acid (PFBS)		0.0093		ug/L	0.0020
08/27/2020 22:30	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
08/27/2020 22:30	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
08/27/2020 22:30	Perfluorohexanoic acid (PFHxA)		0.0049		ug/L	0.0020
08/27/2020 22:30	Perfluorononanoic acid (PFNA)		0.0035		ug/L	0.0020
08/27/2020 22:30	Perfluorooctanesulfonic acid (PFOS)		0.034		ug/L	0.0020
08/27/2020 22:30	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
08/25/2020 14:58	Sodium Total ICAP		55		mg/L	10
08/20/2020 18:38	Sulfate		77	250	mg/L	2.5
08/25/2020 23:15	Total Dissolved Solids (TDS)		390	500	mg/L	10
08/26/2020 11:34	Total Hardness as CaCO3 by ICP (calc)		200		mg/L	3.0
08/20/2020 18:38	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
08/26/2020 01:17	Total Organic Carbon		0.82		mg/L	0.20
08/21/2020 21:10	Uranium by ICPMS as pCi/L		1.4		pCi/L	0.70
08/21/2020 20:22	Uranium ICAP/MS		2.1	30	ug/L	1.0

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200820 (202008200210)					Sampled on 08/20/2020 0833				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	13C2-PFDA	93	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	13C2-PFHxA	100	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	101	%		1
08/24/20	08/27/20 17:14	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-2-20200820 (202008200211)					Sampled on 08/20/2020 0836				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	13C2-PFDA	79	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	13C2-PFHxA	82	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	13C2-PFOA- IS#1	134	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	13C3-HFPO-DA	81	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	d3-NMeFOSAA	102	%		1
08/24/20	08/28/20 10:42	1270265	1271561	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-3-20200820 (202008200212)

Sampled on 08/20/2020 0839

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	13C2-PFDA	93	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	13C2-PFHxA	97	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	92	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	103	%		1
08/24/20	08/27/20 17:34	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-4-20200820 (202008200213)

Sampled on 08/20/2020 0842

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	13C2-PFDA	88	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	13C2-PFHxA	96	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	91	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/24/20	08/27/20 17:43	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	98	%		1

IX-1-20200820 (202008200214)

Static ID: 537.1

Sampled on 08/20/2020 0845

EPA 537.1 - EPA Method 537.1

08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	13C2-PFDA	94	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	13C2-PFHxA	100	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	103	%		1
08/24/20	08/27/20 17:53	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

IX-2-20200820 (202008200215)

Sampled on 08/20/2020 0848

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0027	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	13C2-PFDA	92	%		1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	13C2-PFHxA	102	%		1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	103	%		1

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 18:02	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	97	%		1
IX-3-20200820 (202008200216)						Sampled on 08/20/2020 0851			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	13C2-PFDA	92	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	13C2-PFHxA	101	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	96	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/24/20	08/27/20 18:12	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	93	%		1
IX-4-20200820 (202008200217)						Sampled on 08/20/2020 0854			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0029	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	13C2-PFDA	95	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	13C2-PFHxA	102	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	98	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/24/20	08/27/20 18:31	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	98	%		1

LH-INF-20200820 (202008200220)

Sampled on 08/20/2020 0857

EPA 200.8 - ICPMS Metals

08/21/20	08/21/20 20:20	1269926	1269852	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
08/21/20	08/21/20 20:20	1269926	1269852	(EPA 200.8)	Uranium ICAP/MS	5.6	ug/L	1.0	1

EPA 200.7 - ICP Metals

08/21/20	08/25/20 14:57	1269926	1270599	(EPA 200.7)	Calcium Total ICAP	120	mg/L	10	10
08/21/20	08/25/20 14:57	1269926	1270599	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.20	10
08/21/20	08/25/20 14:57	1269926	1270599	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	1.0	10
08/21/20	08/25/20 14:57	1269926	1270599	(EPA 200.7)	Potassium Total ICAP	ND	mg/L	10	10
08/21/20	08/25/20 14:57	1269926	1270599	(EPA 200.7)	Sodium Total ICAP	74	mg/L	10	10

SM 5310C - Total Organic Carbon

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	08/26/20 01:00		1270615	(SM 5310C)	Total Organic Carbon	0.70	mg/L	0.20	1
EPA 200.8 - Uranium by ICPMS as pCi/L									
	08/21/20 21:10			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.7 (c)	pCi/L	0.70	1
SM 2340B - Total Hardness as CaCO3 by ICP									
	08/26/20 11:34			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	390 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
	08/27/20 14:59		1271276	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.67	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	08/20/20 18:51		1269832	(EPA 300.0)	Nitrate as Nitrogen by IC	2.9	mg/L	0.50	5
	08/20/20 18:51		1269832	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
	08/20/20 18:51		1269832	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	08/20/20 18:51		1269832	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.9	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	08/20/20 18:51		1269833	(EPA 300.0)	Chloride	110	mg/L	2.5	5
	08/20/20 18:51		1269833	(EPA 300.0)	Sulfate	180	mg/L	2.5	5
EPA 314.0 - Perchlorate									
	08/28/20 23:32	(1)	1271723	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.029	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1

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Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	13C2-PFDA	90	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	13C2-PFHxA	100	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/24/20	08/27/20 18:41	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	93	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	08/25/20 14:54			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.95	1
EPA 524.2 - Volatile Organics by GCMS									
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1

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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Chloroform (Trichloromethane)	0.63	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Total THM	0.63	ug/L	0.50	1

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	1,2-Dichloroethane-d4	106	%		1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	4-Bromofluorobenzene	102	%		1
08/25/20	08/25/20 20:41	1270778	1270782	(EPA 524.2)	Toluene-d8	90	%		1
SM 2320B - Alkalinity in CaCO3 units									
	08/27/20 18:18		1271304	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
08/25/20	08/25/20 23:14	1270721	1270724	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	660	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	08/26/20 21:25		1270719	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<u>GAC-5-20200820 (202008200228)</u>					Sampled on 08/20/2020 1033				
EPA 537.1 - EPA Method 537.1									
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	13C2-PFDA	84	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	13C2-PFHxA	88	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	124	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	83	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/24/20	08/27/20 18:50	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-6-20200820 (202008200229)

Sampled on 08/20/2020 1036

EPA 537.1 - EPA Method 537.1

08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	13C2-PFDA	88	%		1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	13C2-PFHxA	97	%		1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	13C3-HFPO-DA	89	%		1

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/24/20	08/27/20 19:00	1270265	1271398	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-7-20200820 (202008200230)

Sampled on 08/20/2020 1039

EPA 537.1 - EPA Method 537.1

08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	13C2-PFDA	113	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	13C2-PFHxA	117	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	13C3-HFPO-DA	108	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	d3-NMeFOSAA	103	%		1
08/24/20	08/26/20 10:56	1270381	1270852	(EPA 537.1)	d5-NEtFOSAA	115	%		1

GAC-8-20200820 (202008200231)

Sampled on 08/20/2020 1042

EPA 537.1 - EPA Method 537.1

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	13C2-PFDA	104	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	13C2-PFHxA	102	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	103	%		1
08/24/20	08/27/20 21:42	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	105	%		1

IX-5-20200820 (202008200232)

Sampled on 08/20/2020 1045

EPA 537.1 - EPA Method 537.1

08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	13C2-PFDA	104	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	13C2-PFHxA	105	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	98	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/24/20	08/27/20 21:52	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-6-20200820 (202008200233)

Sampled on 08/20/2020 1048

EPA 537.1 - EPA Method 537.1

08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	13C2-PFDA	89	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	13C2-PFHxA	93	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	126	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	88	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/24/20	08/27/20 22:02	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	103	%		1

IX-7-20200820 (202008200234)

Sampled on 08/20/2020 1051

EPA 537.1 - EPA Method 537.1

08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0049	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	13C2-PFDA	104	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	13C2-PFHxA	108	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	102	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/24/20	08/27/20 22:11	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	108	%		1

IX-8-20200820 (202008200235)

Sampled on 08/20/2020 1054

EPA 537.1 - EPA Method 537.1

08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	13C2-PFDA	107	%		1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	13C2-PFHxA	109	%		1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1

Rounding on totals after summation.
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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	103	%		1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/24/20	08/27/20 22:21	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	103	%		1
MB-INF-20200820 (202008200236)						Sampled on 08/20/2020 1057			
EPA 200.8 - ICPMS Metals									
08/21/20	08/21/20 20:22	1269926	1269852	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
08/21/20	08/21/20 20:22	1269926	1269852	(EPA 200.8)	Uranium ICAP/MS	2.1	ug/L	1.0	1
EPA 200.7 - ICP Metals									
08/21/20	08/25/20 14:58	1269926	1270599	(EPA 200.7)	Calcium Total ICAP	62	mg/L	10	10
08/21/20	08/25/20 14:58	1269926	1270599	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.20	10
08/21/20	08/25/20 14:58	1269926	1270599	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	1.0	10
08/21/20	08/25/20 14:58	1269926	1270599	(EPA 200.7)	Potassium Total ICAP	ND	mg/L	10	10
08/21/20	08/25/20 14:58	1269926	1270599	(EPA 200.7)	Sodium Total ICAP	55	mg/L	10	10
SM 5310C - Total Organic Carbon									
08/26/20	01:17		1270615	(SM 5310C)	Total Organic Carbon	0.82	mg/L	0.20	1
EPA 200.8 - Uranium by ICPMS as pCi/L									
08/21/20	21:10			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.4 (c)	pCi/L	0.70	1
SM 2340B - Total Hardness as CaCO3 by ICP									
08/26/20	11:34			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	200 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
08/27/20	15:09		1271276	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.44	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
08/20/20	18:38		1269832	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5
08/20/20	18:38		1269832	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
08/20/20	18:38		1269832	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/20/20	18:38		1269832	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
08/20/20	18:38		1269833	(EPA 300.0)	Chloride	48	mg/L	2.5	5
08/20/20	18:38		1269833	(EPA 300.0)	Sulfate	77	mg/L	2.5	5
EPA 314.0 - Perchlorate									
08/28/20	23:57	(1)	1271723	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	11-chloroheicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/20/2020 1337

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0093	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0049	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0035	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.034	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	13C2-PFDA	101	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	13C2-PFHxA	107	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	13C3-HFPO-DA	101	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/24/20	08/27/20 22:30	1270278	1271408	(EPA 537.1)	d5-NEtFOSAA	100	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	08/25/20 14:54			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.97	1
EPA 524.2 - Volatile Organics by GCMS									
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1

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Samples Received on:
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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1

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08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	1,2-Dichloroethane-d4	106	%		1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	4-Bromofluorobenzene	111	%		1
08/25/20	08/25/20 21:04	1270778	1270782	(EPA 524.2)	Toluene-d8	90	%		1
SM 2320B - Alkalinity in CaCO3 units									
	08/27/20 18:09		1271304	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
08/25/20	08/25/20 23:15	1270721	1270724	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	390	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	08/26/20 21:26		1270719	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
FB-HOLD-20200820 (202008200237)									
EPA 537.1 - EPA Method 537.1									
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Sampled on 08/20/2020 1100

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08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	13C2-PFDA	122	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	13C2-PFHxA	109	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	104	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/31/20	09/01/20 17:23	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	119	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 888431
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1269832

202008200220 LH-INF-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/20/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1269833

202008200220 LH-INF-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/20/2020

Analyzed by: HL7J
 Analyzed by: HL7J

ICPMS Metals

Prep Batch: 1269926 Analytical Batch: 1269852

202008200220 LH-INF-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/21/2020

Analyzed by: DHX7
 Analyzed by: DHX7

ICP Metals

Prep Batch: 1269926 Analytical Batch: 1270599

202008200220 LH-INF-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/25/2020

Analyzed by: Y7TT
 Analyzed by: Y7TT

Total Organic Carbon

Analytical Batch: 1270615

202008200220 LH-INF-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/26/2020

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

Total Suspended Solids (TSS)

Analytical Batch: 1270719

202008200220 LH-INF-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/26/2020

Analyzed by: TJ52
 Analyzed by: TJ52

Total Dissolved Solids (TDS)

Prep Batch: 1270721 Analytical Batch: 1270724

202008200220 LH-INF-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/25/2020

Analyzed by: TJ52
 Analyzed by: TJ52

Volatile Organics by GCMS

Prep Batch: 1270778 Analytical Batch: 1270782

202008200220 LH-INF-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/25/2020

Analyzed by: TR7W
 Analyzed by: TR7W

EPA Method 537.1

Prep Batch: 1270381 Analytical Batch: 1270852

202008200230 GAC-7-20200820

Analysis Date: 08/26/2020

Analyzed by: SZZ

Hexavalent chromium(Dissolved)

Analytical Batch: 1271276

202008200220 LH-INF-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/27/2020

Analyzed by: TLH
 Analyzed by: TLH

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Report: 888431
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Alkalinity in CaCO3 units

Analytical Batch: 1271304

202008200220 LH-INF-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/27/2020

Analyzed by: ZS6I
 Analyzed by: ZS6I

EPA Method 537.1

Prep Batch: 1270265 Analytical Batch: 1271398

202008200210 GAC-1-20200820
 202008200212 GAC-3-20200820
 202008200213 GAC-4-20200820
 202008200214 IX-1-20200820
 202008200215 IX-2-20200820
 202008200216 IX-3-20200820
 202008200217 IX-4-20200820
 202008200220 LH-INF-20200820
 202008200228 GAC-5-20200820
 202008200229 GAC-6-20200820

Analysis Date: 08/27/2020

Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM

EPA Method 537.1

Prep Batch: 1270278 Analytical Batch: 1271408

202008200231 GAC-8-20200820
 202008200232 IX-5-20200820
 202008200233 IX-6-20200820
 202008200234 IX-7-20200820
 202008200235 IX-8-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/27/2020

Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM

EPA Method 537.1

Prep Batch: 1270265 Analytical Batch: 1271561

202008200211 GAC-2-20200820

Analysis Date: 08/28/2020

Analyzed by: Y7BM

Perchlorate

Analytical Batch: 1271723

202008200220 LH-INF-20200820
 202008200236 MB-INF-20200820

Analysis Date: 08/28/2020

Analyzed by: H5VG
 Analyzed by: H5VG

EPA Method 537.1

Prep Batch: 1271848 Analytical Batch: 1272407

202008200237 FB-HOLD-20200820

Analysis Date: 09/01/2020

Analyzed by: KAM

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1269832					Analysis Date: 08/20/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.59	mg/L	104	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.59	mg/L	104	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0487	mg/L	97	(50-150)		
MS_202008200193	Nitrate as Nitrogen by IC	8.6	2.6	11.4	mg/L	110	(80-120)		
MS_202008200220	Nitrate as Nitrogen by IC	2.9	6.5	9.04	mg/L	99	(80-120)		
MSD_202008200193	Nitrate as Nitrogen by IC	8.6	2.6	11.3	mg/L	107	(80-120)	20	0.47
MSD_202008200220	Nitrate as Nitrogen by IC	2.9	6.5	9.56	mg/L	107	(80-120)	20	5.7
LCS1	Nitrite Nitrogen by IC		1	1.08	mg/L	108	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.08	mg/L	108	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0548	mg/L	110	(50-150)		
MS_202008200193	Nitrite Nitrogen by IC	ND	1	1.01	mg/L	101	(80-120)		
MS_202008200220	Nitrite Nitrogen by IC	ND	2.5	2.45	mg/L	98	(80-120)		
MSD_202008200193	Nitrite Nitrogen by IC	ND	1	1.01	mg/L	101	(80-120)	20	0.0099
MSD_202008200220	Nitrite Nitrogen by IC	ND	2.5	2.70	mg/L	108	(80-120)	20	9.8
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1269833					Analysis Date: 08/20/2020				
LCS1	Chloride		25	26.8	mg/L	107	(90-110)		
LCS2	Chloride		25	26.8	mg/L	107	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.461	mg/L	92	(50-150)		
MS_202008200220	Chloride	110	65	173	mg/L	102	(80-120)		
MSD_202008200220	Chloride	110	65	178	mg/L	109	(80-120)	20	2.9
LCS1	Sulfate		50	52.8	mg/L	106	(90-110)		
LCS2	Sulfate		50	52.5	mg/L	105	(90-110)	20	0.57
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.974	mg/L	97	(50-150)		
MRLW	Sulfate		0.25	0.224	mg/L	90	(50-150)		
MS_202008200220	Sulfate	180	125	303	mg/L	99	(80-120)		
MSD_202008200220	Sulfate	180	125	315	mg/L	108	(80-120)	20	3.8
ICPMS Metals by EPA 200.8									
Analytical Batch: 1269852					Analysis Date: 08/21/2020				

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Manganese Total ICAP/MS		100	101	ug/L	101	(85-115)		
LCS2	Manganese Total ICAP/MS		100	100	ug/L	101	(85-115)	20	0.0
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.00	ug/L	100	(50-150)		
MS_202008180173	Manganese Total ICAP/MS	9.3	100	97.6	ug/L	88	(70-130)		
MS2_202008190750	Manganese Total ICAP/MS	ND	100	90.1	ug/L	90	(70-130)		
MSD_202008180173	Manganese Total ICAP/MS	9.3	100	97.5	ug/L	88	(70-130)	20	0.070
MSD2_202008190750	Manganese Total ICAP/MS	ND	100	88.8	ug/L	89	(70-130)	20	1.4
LCS1	Uranium ICAP/MS		50	50.6	ug/L	101	(85-115)		
LCS2	Uranium ICAP/MS		50	49.9	ug/L	100	(85-115)	20	1.4
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.971	ug/L	97	(50-150)		
MS_202008180173	Uranium ICAP/MS	7	50	57.7	ug/L	101	(70-130)		
MS2_202008190750	Uranium ICAP/MS	ND	50	45.5	ug/L	91	(70-130)		
MSD_202008180173	Uranium ICAP/MS	7	50	58.9	ug/L	104	(70-130)	20	2.0
MSD2_202008190750	Uranium ICAP/MS	ND	50	45.1	ug/L	90	(70-130)	20	0.82

ICP Metals by EPA 200.7

Analytical Batch: 1270599

Analysis Date: 08/25/2020

LCS1	Calcium Total ICAP		50	49.7	mg/L	99	(85-115)		
LCS2	Calcium Total ICAP		50	49.5	mg/L	99	(85-115)	20	0.40
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.958	mg/L	96	(50-150)		
MS_202008190486	Calcium Total ICAP	9	50	57.7	mg/L	97	(70-130)		
MS2_202008200588	Calcium Total ICAP	7.9	50	57.3	mg/L	99	(70-130)		
MSD_202008190486	Calcium Total ICAP	9	50	58.6	mg/L	99	(70-130)	20	1.6
MSD2_202008200588	Calcium Total ICAP	7.9	50	58.3	mg/L	101	(70-130)	20	1.8
LCS1	Iron Total ICAP		5	4.98	mg/L	100	(85-115)		
LCS2	Iron Total ICAP		5	4.96	mg/L	99	(85-115)	20	0.40
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0200	mg/L	100	(50-150)		
MS_202008190486	Iron Total ICAP	ND	5	4.92	mg/L	98	(70-130)		
MS2_202008200588	Iron Total ICAP	ND	5	4.95	mg/L	99	(70-130)		
MSD_202008190486	Iron Total ICAP	ND	5	5.01	mg/L	100	(70-130)	20	1.8
MSD2_202008200588	Iron Total ICAP	ND	5	5.04	mg/L	101	(70-130)	20	1.9
LCS1	Magnesium Total ICAP		20	19.6	mg/L	98	(85-115)		
LCS2	Magnesium Total ICAP		20	19.5	mg/L	98	(85-115)	20	0.51
MBLK	Magnesium Total ICAP			<0.05	mg/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Magnesium Total ICAP		0.1	0.0888	mg/L	89	(50-150)		
MS_202008190486	Magnesium Total ICAP	1.4	20	21.0	mg/L	98	(70-130)		
MS2_202008200588	Magnesium Total ICAP	0.76	20	20.5	mg/L	99	(70-130)		
MSD_202008190486	Magnesium Total ICAP	1.4	20	21.4	mg/L	100	(70-130)	20	1.8
MSD2_202008200588	Magnesium Total ICAP	0.76	20	20.9	mg/L	101	(70-130)	20	2.0
LCS1	Potassium Total ICAP		20	19.6	mg/L	98	(85-115)		
LCS2	Potassium Total ICAP		20	19.6	mg/L	98	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.626	mg/L	63	(50-150)		
MS_202008190486	Potassium Total ICAP	ND	20	20.5	mg/L	101	(70-130)		
MS2_202008200588	Potassium Total ICAP	ND	20	20.8	mg/L	103	(70-130)		
MSD_202008190486	Potassium Total ICAP	ND	20	20.8	mg/L	103	(70-130)	20	1.4
MSD2_202008200588	Potassium Total ICAP	ND	20	21.2	mg/L	105	(70-130)	20	1.9
LCS1	Sodium Total ICAP		50	49.0	mg/L	98	(85-115)		
LCS2	Sodium Total ICAP		50	48.8	mg/L	98	(85-115)	20	0.41
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.933	mg/L	93	(50-150)		
MS_202008190486	Sodium Total ICAP	4.2	50	52.1	mg/L	96	(70-130)		
MS2_202008200588	Sodium Total ICAP	9.2	50	56.9	mg/L	95	(70-130)		
MSD_202008190486	Sodium Total ICAP	4.2	50	53.1	mg/L	98	(70-130)	20	2.0
MSD2_202008200588	Sodium Total ICAP	9.2	50	57.8	mg/L	97	(70-130)	20	1.6

Total Organic Carbon by SM 5310C

Analytical Batch: 1270615

Analysis Date: 08/25/2020

LCS1	Total Organic Carbon		5	5.13	mg/L	103	(90-110)		
LCS2	Total Organic Carbon		5	5.04	mg/L	101	(90-110)	20	1.8
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.251	mg/L	125	(50-150)		
MS_202008210479	Total Organic Carbon	3.6	4	7.60	mg/L	101	(80-120)		
MSD_202008210479	Total Organic Carbon	3.6	4	7.61	mg/L	101	(80-120)	20	0.12

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1270719

Analysis Date: 08/26/2020

DUP_202007150064	Total Suspended Solids (TSS)	310		284	mg/L		(0-10)	10	7.5
DUP_202007150075	Total Suspended Solids (TSS)	58		60.0	mg/L		(0-10)	10	3.4
LCS1	Total Suspended Solids (TSS)		175	156	mg/L	89	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	176	mg/L	101	(71-107)	20	12
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	10.0	mg/L	100	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 888431
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 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Total Dissolved Solids (TDS) by E160.1/SM2540C									
Analytical Batch: 1270724					Analysis Date: 08/25/2020				
DUP_202008190786	Total Dissolved Solid (TDS)	480		482	mg/L		(0-10)	10	0.42
DUP_202008200188	Total Dissolved Solid (TDS)	280		272	mg/L		(0-10)	10	2.2
LCS1	Total Dissolved Solid (TDS)		175	168	mg/L	96	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	704	mg/L	101	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	9.00	mg/L	90	(50-150)		
Volatile Organics by GCMS by EPA 524.2									
Analytical Batch: 1270782					Analysis Date: 08/25/2020				
LCS1	1,1,1,2-Tetrachloroethane		5	4.89	ug/L	98	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.15	ug/L	103	(70-130)	20	5.2
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.92	ug/L	98	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.99	ug/L	100	(70-130)	20	1.4
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.35	ug/L	107	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.32	ug/L	106	(70-130)	20	0.56
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.49	ug/L	90	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.47	ug/L	89	(70-130)	20	0.45
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	1,1-Dichloroethane		5	5.05	ug/L	101	(70-130)		
LCS2	1,1-Dichloroethane		5	5.21	ug/L	104	(70-130)	20	3.1
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.07	ug/L	101	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.19	ug/L	104	(70-130)	20	2.3
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.580	ug/L	116	(50-150)		
LCS1	1,1-Dichloropropene		5	4.83	ug/L	97	(70-130)		
LCS2	1,1-Dichloropropene		5	4.92	ug/L	98	(70-130)	20	1.9
MBLK	1,1-Dichloropropene			<0.5	ug/L				

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,1-Dichloropropene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.51	ug/L	90	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.35	ug/L	87	(70-130)	20	3.6
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.690	ug/L	138	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.04	ug/L	101	(70-130)		
LCS2	1,2,3-Trichloropropane		5	4.93	ug/L	99	(70-130)	20	2.2
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.30	ug/L	86	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.39	ug/L	88	(70-130)	20	2.1
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.92	ug/L	98	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.85	ug/L	97	(70-130)	20	1.4
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.700	ug/L	140	(50-150)		
LCS1	1,2-Dichloroethane		5	5.09	ug/L	102	(70-130)		
LCS2	1,2-Dichloroethane		5	5.16	ug/L	103	(70-130)	20	1.4
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	103	%	103	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			104	%	104	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
MRLLLW	1,2-Dichloroethane-d4 (S)		5	107	%	107	(70-130)		
LCS1	1,2-Dichloropropane		5	4.83	ug/L	97	(70-130)		
LCS2	1,2-Dichloropropane		5	5.02	ug/L	100	(70-130)	20	3.9
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	5.13	ug/L	103	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	5.17	ug/L	103	(70-130)	20	0.78
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,3-Dichloropropane		5	4.49	ug/L	90	(70-130)		
LCS2	1,3-Dichloropropane		5	4.71	ug/L	94	(70-130)	20	4.8
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.470	ug/L	94	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 888431
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	2,2-Dichloropropane		5	4.52	ug/L	90	(70-130)		
LCS2	2,2-Dichloropropane		5	4.96	ug/L	99	(70-130)	20	9.3
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.520	ug/L	104	(50-150)		
LCS1	2-Butanone (MEK)		50	48.6	ug/L	97	(70-130)		
LCS2	2-Butanone (MEK)		50	46.9	ug/L	94	(70-130)	20	3.8
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.73	ug/L	115	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	101	%	101	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	105	%	105	(70-130)		
MBLK	4-Bromofluorobenzene (S)			101	%	101	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	99.6	%	100	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	104	%	104	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	44.6	ug/L	89	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	45.8	ug/L	92	(70-130)	20	2.6
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.67	ug/L	93	(50-150)		
LCS1	Benzene		5	5.18	ug/L	104	(70-130)		
LCS2	Benzene		5	5.30	ug/L	106	(70-130)	20	2.3
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Bromobenzene		5	5.10	ug/L	102	(70-130)		
LCS2	Bromobenzene		5	5.36	ug/L	107	(70-130)	20	5.0
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	Bromochloromethane		5	4.97	ug/L	99	(70-130)		
LCS2	Bromochloromethane		5	4.89	ug/L	98	(70-130)	20	1.6
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.640	ug/L	128	(50-150)		
LCS1	Bromodichloromethane		5	4.71	ug/L	94	(70-130)		
LCS2	Bromodichloromethane		5	5.02	ug/L	100	(70-130)	20	6.4
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.400	ug/L	80	(50-150)		
LCS1	Bromoethane		5	5.33	ug/L	107	(70-130)		
LCS2	Bromoethane		5	5.67	ug/L	113	(70-130)	20	6.2
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.620	ug/L	124	(50-150)		
LCS1	Bromoform		5	4.56	ug/L	91	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 888431
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Bromoform		5	4.50	ug/L	90	(70-130)	20	1.3
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.490	ug/L	98	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.23	ug/L	105	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.38	ug/L	108	(70-130)	20	2.8
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.630	ug/L	126	(50-150)		
LCS1	Carbon disulfide		5	4.98	ug/L	100	(70-130)		
LCS2	Carbon disulfide		5	5.09	ug/L	102	(70-130)	20	2.2
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.430	ug/L	86	(50-150)		
LCS1	Carbon Tetrachloride		5	4.80	ug/L	96	(70-130)		
LCS2	Carbon Tetrachloride		5	4.68	ug/L	94	(70-130)	20	2.5
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.490	ug/L	98	(50-150)		
LCS1	Chlorobenzene		5	4.51	ug/L	90	(70-130)		
LCS2	Chlorobenzene		5	4.61	ug/L	92	(70-130)	20	2.2
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.400	ug/L	80	(50-150)		
LCS1	Chlorodibromomethane		5	4.00	ug/L	80	(70-130)		
LCS2	Chlorodibromomethane		5	4.12	ug/L	82	(70-130)	20	3.0
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.360	ug/L	72	(50-150)		
LCS1	Chloroethane		5	5.34	ug/L	107	(70-130)		
LCS2	Chloroethane		5	5.46	ug/L	109	(70-130)	20	2.2
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.590	ug/L	118	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.93	ug/L	99	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.02	ug/L	100	(70-130)	20	1.8
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.540	ug/L	108	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.54	ug/L	91	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.59	ug/L	92	(70-130)	20	1.1
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.660	ug/L	132	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	5.17	ug/L	103	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	5.08	ug/L	102	(70-130)	20	1.8
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 888431
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.560	ug/L	112	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.50	ug/L	90	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.59	ug/L	92	(70-130)	20	2.0
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Dibromomethane		5	4.53	ug/L	91	(70-130)		
LCS2	Dibromomethane		5	4.52	ug/L	90	(70-130)	20	0.22
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.55	ug/L	91	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.92	ug/L	98	(70-130)	20	7.8
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Dichloromethane		5	5.49	ug/L	110	(70-130)		
LCS2	Dichloromethane		5	5.22	ug/L	104	(70-130)	20	5.0
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Di-isopropyl ether		5	4.95	ug/L	99	(70-130)		
LCS2	Di-isopropyl ether		5	5.06	ug/L	101	(70-130)	20	2.2
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.530	ug/L	106	(50-150)		
LCS1	Ethyl benzene		5	4.77	ug/L	95	(70-130)		
LCS2	Ethyl benzene		5	4.96	ug/L	99	(70-130)	20	3.9
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Hexachlorobutadiene		5	4.42	ug/L	88	(70-130)		
LCS2	Hexachlorobutadiene		5	5.08	ug/L	102	(70-130)	20	14
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.570	ug/L	114	(50-150)		
LCS1	Isopropylbenzene		5	5.25	ug/L	105	(70-130)		
LCS2	Isopropylbenzene		5	5.19	ug/L	104	(70-130)	20	1.1
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	m,p-Xylenes		10	9.89	ug/L	99	(70-130)		
LCS2	m,p-Xylenes		10	10.2	ug/L	102	(70-130)	20	4.1
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	1.11	ug/L	111	(50-150)		
MRLW	m,p-Xylenes		0.5	0.600	ug/L	120	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	m-Dichlorobenzene (1,3-DCB)		5	5.23	ug/L	105	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.31	ug/L	106	(70-130)	20	1.5
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.470	ug/L	94	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.93	ug/L	99	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.09	ug/L	102	(70-130)	20	3.2
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.650	ug/L	130	(50-150)		
LCS1	Naphthalene		5	4.14	ug/L	83	(70-130)		
LCS2	Naphthalene		5	4.19	ug/L	84	(70-130)	20	1.2
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.570	ug/L	114	(50-150)		
LCS1	n-Butylbenzene		5	4.96	ug/L	99	(70-130)		
LCS2	n-Butylbenzene		5	4.87	ug/L	97	(70-130)	20	1.8
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	n-Propylbenzene		5	5.06	ug/L	101	(70-130)		
LCS2	n-Propylbenzene		5	5.29	ug/L	106	(70-130)	20	4.4
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	o-Chlorotoluene		5	5.46	ug/L	109	(70-130)		
LCS2	o-Chlorotoluene		5	5.38	ug/L	108	(70-130)	20	1.5
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.510	ug/L	102	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.84	ug/L	97	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.97	ug/L	99	(70-130)	20	2.6
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.480	ug/L	96	(50-150)		
LCS1	o-Xylene		5	4.75	ug/L	95	(70-130)		
LCS2	o-Xylene		5	5.02	ug/L	100	(70-130)	20	5.5
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.550	ug/L	110	(50-150)		
LCS1	p-Chlorotoluene		5	5.18	ug/L	104	(70-130)		
LCS2	p-Chlorotoluene		5	5.35	ug/L	107	(70-130)	20	3.2
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.500	ug/L	100	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.09	ug/L	102	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.45	ug/L	109	(70-130)	20	6.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.470	ug/L	94	(50-150)		
LCS1	p-Isopropyltoluene		5	5.15	ug/L	103	(70-130)		
LCS2	p-Isopropyltoluene		5	5.41	ug/L	108	(70-130)	20	4.9
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.710	ug/L	142	(50-150)		
LCS1	sec-Butylbenzene		5	5.55	ug/L	111	(70-130)		
LCS2	sec-Butylbenzene		5	5.53	ug/L	111	(70-130)	20	0.36
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.690	ug/L	138	(50-150)		
LCS1	Styrene		5	4.63	ug/L	93	(70-130)		
LCS2	Styrene		5	4.76	ug/L	95	(70-130)	20	2.8
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.540	ug/L	108	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.26	ug/L	85	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.31	ug/L	86	(70-130)	20	1.2
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.430	ug/L	86	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.70	ug/L	94	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.77	ug/L	95	(70-130)	20	1.5
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.450	ug/L	90	(50-150)		
LCS1	tert-Butylbenzene		5	5.39	ug/L	108	(70-130)		
LCS2	tert-Butylbenzene		5	5.31	ug/L	106	(70-130)	20	1.5
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.18	ug/L	84	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.43	ug/L	89	(70-130)	20	5.8
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.420	ug/L	84	(50-150)		
LCS1	Toluene		5	4.69	ug/L	94	(70-130)		
LCS2	Toluene		5	4.86	ug/L	97	(70-130)	20	3.6
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Toluene-d8 (S)		5	97.6	%	98	(70-130)		
LCS2	Toluene-d8 (S)		5	99.6	%	100	(70-130)		
MBLK	Toluene-d8 (S)			91.6	%	92	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	91.6	%	92	(70-130)		

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRLW	Toluene-d8 (S)		5	89.4	%	89	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	5.75	ug/L	115	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.60	ug/L	112	(70-130)	20	2.6
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.530	ug/L	106	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.24	ug/L	85	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.53	ug/L	91	(70-130)	20	6.6
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.81	ug/L	96	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.86	ug/L	97	(70-130)	20	1.0
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.430	ug/L	86	(50-150)		
LCS1	Trichlorofluoromethane		5	4.62	ug/L	92	(70-130)		
LCS2	Trichlorofluoromethane		5	4.73	ug/L	95	(70-130)	20	2.4
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.97	ug/L	99	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	5.07	ug/L	101	(70-130)	20	2.0
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Vinyl chloride (VC)		5	5.06	ug/L	101	(70-130)		
LCS2	Vinyl chloride (VC)		5	5.11	ug/L	102	(70-130)	20	0.98
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.510	ug/L	102	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.280	ug/L	112	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1270381 Analytical Batch: 1270852

Analysis Date: 08/26/2020

DUP_202008200514	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0219	ug/L	93	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0221	ug/L	94	(70-130)	30	0.91
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00160	ug/L	85	(50-150)		
MS1_202008200511	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0218	ug/L	93	(70-130)		
DUP_202008200514	13C2-PFDA (S)			127	%	127	(70-130)		
LCS1	13C2-PFDA (S)		100	124	%	124	(70-130)		
LCS2	13C2-PFDA (S)		100	125	%	125	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFDA (S)			123	%	123	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	119	%	119	(70-130)		
MS1_202008200511	13C2-PFDA (S)		100	127	%	127	(70-130)		
DUP_202008200514	13C2-PFHxA (S)			128	%	128	(70-130)		
LCS1	13C2-PFHxA (S)		100	129	%	129	(70-130)		
LCS2	13C2-PFHxA (S)		100	131	%	131	(70-130)		
MBLK	13C2-PFHxA (S)			128	%	128	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	126	%	126	(70-130)		
MS1_202008200511	13C2-PFHxA (S)		100	133	%	133	(70-130)		
DUP_202008200514	13C2-PFOA- IS#1 (I)			105	%	105	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			110	%	110	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	110	%	111	(50-150)		
MS1_202008200511	13C2-PFOA- IS#1 (I)		100	115	%	115	(50-150)		
DUP_202008200514	13C3-HFPO-DA (S)			107	%	107	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	121	%	121	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	122	%	122	(70-130)		
MBLK	13C3-HFPO-DA (S)			120	%	120	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	117	%	117	(70-130)		
MS1_202008200511	13C3-HFPO-DA (S)		100	124	%	124	(70-130)		
DUP_202008200514	13C4-PFOS- IS#2 (I)			96.4	%	96	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	96.0	%	96	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MS1_202008200511	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
DUP_202008200514	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0238	ug/L	101	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0244	ug/L	103	(70-130)	30	2.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00192	ug/L	101	(50-150)		
MS1_202008200511	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0238	ug/L	100	(70-130)		
DUP_202008200514	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0242	ug/L	104	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0238	ug/L	102	(70-130)	30	1.7
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00187	ug/L	100	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202008200511	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0233	ug/L	100	(70-130)		
DUP_202008200514	d3-NMeFOSAA (I)			102	%	102	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	99.6	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			107	%	107	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MS1_202008200511	d3-NMeFOSAA (I)		100	114	%	114	(50-150)		
DUP_202008200514	d5-NEtFOSAA (S)			113	%	113	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	123	%	123	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	121	%	121	(70-130)		
MBLK	d5-NEtFOSAA (S)			123	%	123	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	122	%	123	(70-130)		
MS1_202008200511	d5-NEtFOSAA (S)		100	116	%	116	(70-130)		
DUP_202008200514	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0238	ug/L	95	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0249	ug/L	100	(70-130)	30	4.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00189	ug/L	95	(50-150)		
MS1_202008200511	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0257	ug/L	103	(70-130)		
DUP_202008200514	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0251	ug/L	100	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0251	ug/L	100	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00203	ug/L	102	(50-150)		
MS1_202008200511	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0249	ug/L	100	(70-130)		
DUP_202008200514	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0254	ug/L	102	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	106	(70-130)	30	3.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00210	ug/L	105	(50-150)		
MS1_202008200511	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0262	ug/L	105	(70-130)		
DUP_202008200514	Perfluorobutanesulfonic acid (PFBS)	0.020		0.0195	ug/L		(0-30)	30	3.7
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0231	ug/L	104	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0237	ug/L	107	(70-130)	30	2.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00184	ug/L	104	(50-150)		
MS1_202008200511	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0267	ug/L	113	(70-130)		
DUP_202008200514	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0247	ug/L	99	(70-130)	30	2.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00196	ug/L	98	(50-150)		
MS1_202008200511	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0253	ug/L	101	(70-130)		
DUP_202008200514	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0243	ug/L	97	(70-130)	30	0.41
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00184	ug/L	92	(50-150)		
MS1_202008200511	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0240	ug/L	96	(70-130)		
DUP_202008200514	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0264	ug/L	105	(70-130)	30	1.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202008200511	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0252	ug/L	101	(70-130)		
DUP_202008200514	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0241	ug/L	106	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)	30	2.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00194	ug/L	107	(50-150)		
MS1_202008200511	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0244	ug/L	107	(70-130)		
DUP_202008200514	Perfluorohexanoic acid (PFHxA)	0.0060		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0259	ug/L	104	(70-130)	30	1.5
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202008200511	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0268	ug/L	107	(70-130)		
DUP_202008200514	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0258	ug/L	103	(70-130)	30	1.2
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00208	ug/L	104	(50-150)		
MS1_202008200511	Perfluorononanoic acid (PFNA)	ND	0.025	0.0264	ug/L	106	(70-130)		
DUP_202008200514	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0244	ug/L	106	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0246	ug/L	106	(70-130)	30	0.82

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00195	ug/L	106	(50-150)		
MS1_202008200511	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0248	ug/L	106	(70-130)		
DUP_202008200514	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0266	ug/L	106	(70-130)	30	0.76
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202008200511	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0257	ug/L	102	(70-130)		
DUP_202008200514	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0234	ug/L	93	(70-130)	30	4.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00180	ug/L	90	(50-150)		
MS1_202008200511	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0242	ug/L	97	(70-130)		
DUP_202008200514	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0240	ug/L	96	(70-130)	30	1.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00180	ug/L	90	(50-150)		
MS1_202008200511	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0240	ug/L	96	(70-130)		
DUP_202008200514	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0246	ug/L	98	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0246	ug/L	99	(70-130)	30	0.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00192	ug/L	96	(50-150)		
MS1_202008200511	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0241	ug/L	96	(70-130)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1271276

Analysis Date: 08/27/2020

LCS1	Hexavalent chromium(Dissolved)		2	1.96	ug/L	98	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.98	ug/L	99	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0213	ug/L	107	(50-150)		
MS_202008180653	Hexavalent chromium(Dissolved)	2.6	2	4.66	ug/L	104	(90-110)		
MS_202008190825	Hexavalent chromium(Dissolved)	0.057	2	2.15	ug/L	105	(90-110)		
MS_202008190827	Hexavalent chromium(Dissolved)	0.041	2	2.11	ug/L	103	(90-110)		
MSD_202008180653	Hexavalent chromium(Dissolved)	2.6	2	4.65	ug/L	103	(90-110)	20	0.23

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202008190827	Hexavalent chromium(Dissolved)	0.041	2	2.12	ug/L	104	(90-110)	20	0.42

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1271304

Analysis Date: 08/27/2020

LCS1	Alkalinity in CaCO3 units		100	99.2	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.4	mg/L	99	(90-110)	20	0.10
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.86	mg/L	93	(50-150)		
MS_202007230573	Alkalinity in CaCO3 units	220	100	280	mg/L	<u>58</u>	(80-120)		
MS_202008250093	Alkalinity in CaCO3 units	45	100	143	mg/L	98	(80-120)		
MSD_202007230573	Alkalinity in CaCO3 units	220	100	263	mg/L	<u>41</u>	(80-120)	20	6.3
MSD_202008250093	Alkalinity in CaCO3 units	45	100	143	mg/L	98	(80-120)	20	0.28

EPA Method 537.1 by EPA 537.1

Prep Batch: 1270265 Analytical Batch: 1271398

Analysis Date: 08/27/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0221	ug/L	94	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0223	ug/L	95	(70-130)	30	0.90
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00177	ug/L	94	(50-150)		
MS_202008190528	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00176	ug/L	93	(50-150)		
MSD_202008190528	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00173	ug/L	92	(50-150)	50	1.7
LCS1	13C2-PFDA (S)		100	99.0	%	99	(70-130)		
LCS2	13C2-PFDA (S)		100	95.6	%	96	(70-130)		
MBLK	13C2-PFDA (S)			96.7	%	97	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	95.0	%	95	(70-130)		
MS_202008190528	13C2-PFDA (S)		100	101	%	101	(70-130)		
MSD_202008190528	13C2-PFDA (S)		100	99.2	%	99	(70-130)		
LCS1	13C2-PFHxA (S)		100	103	%	103	(70-130)		
LCS2	13C2-PFHxA (S)		100	98.2	%	98	(70-130)		
MBLK	13C2-PFHxA (S)			99.3	%	99	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	98.1	%	98	(70-130)		
MS_202008190528	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MSD_202008190528	13C2-PFHxA (S)		100	104	%	104	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			110	%	110	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MS_202008190528	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
MSD_202008190528	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	13C3-HFPO-DA (S)		100	97.9	%	98	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	96.8	%	97	(70-130)		
MBLK	13C3-HFPO-DA (S)			93.2	%	93	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.8	%	95	(70-130)		
MS_202008190528	13C3-HFPO-DA (S)		100	94.7	%	95	(70-130)		
MSD_202008190528	13C3-HFPO-DA (S)		100	97.2	%	97	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.8	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MS_202008190528	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MSD_202008190528	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0251	ug/L	106	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0241	ug/L	102	(70-130)	30	4.1
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00205	ug/L	108	(50-150)		
MS_202008190528	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00208	ug/L	109	(50-150)		
MSD_202008190528	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00204	ug/L	107	(50-150)	50	2.0
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0236	ug/L	102	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0239	ug/L	103	(70-130)	30	0.84
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00192	ug/L	103	(50-150)		
MS_202008190528	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00196	ug/L	105	(50-150)		
MSD_202008190528	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00189	ug/L	101	(50-150)	50	3.7
LCS1	d3-NMeFOSAA (I)		100	99.9	%	100	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	97.8	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			101	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.6	%	100	(50-150)		
MS_202008190528	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MSD_202008190528	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	94.1	%	94	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.6	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			97.3	%	97	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	99.6	%	100	(70-130)		
MS_202008190528	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
MSD_202008190528	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0249	ug/L	100	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0248	ug/L	99	(70-130)	30	0.40

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00200	ug/L	100	(50-150)		
MS_202008190528	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00200	ug/L	99	(50-150)		
MSD_202008190528	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00199	ug/L	99	(50-150)	50	0.61
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0252	ug/L	101	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0262	ug/L	105	(70-130)	30	3.9
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00224	ug/L	112	(50-150)		
MS_202008190528	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00222	ug/L	111	(50-150)		
MSD_202008190528	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00212	ug/L	106	(50-150)	50	4.4
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0259	ug/L	104	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)	30	4.2
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00228	ug/L	114	(50-150)		
MS_202008190528	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00231	ug/L	114	(50-150)		
MSD_202008190528	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00214	ug/L	105	(50-150)	50	7.8
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0233	ug/L	105	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0240	ug/L	108	(70-130)	30	3.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00193	ug/L	109	(50-150)		
MS_202008190528	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00210	ug/L	118	(50-150)		
MSD_202008190528	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00198	ug/L	112	(50-150)	50	5.6
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0255	ug/L	102	(70-130)	30	2.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00219	ug/L	109	(50-150)		
MS_202008190528	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00211	ug/L	104	(50-150)		
MSD_202008190528	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00211	ug/L	104	(50-150)	50	0.16
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0247	ug/L	99	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0245	ug/L	98	(70-130)	30	0.81
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00205	ug/L	103	(50-150)		
MS_202008190528	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00202	ug/L	100	(50-150)		
MSD_202008190528	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00195	ug/L	97	(50-150)	50	3.5
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0268	ug/L	107	(70-130)	30	1.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00233	ug/L	117	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008190528	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00226	ug/L	110	(50-150)		
MSD_202008190528	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00222	ug/L	109	(50-150)	50	1.3
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0249	ug/L	109	(70-130)	30	0.81
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00203	ug/L	112	(50-150)		
MS_202008190528	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00222	ug/L	115	(50-150)		
MSD_202008190528	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00218	ug/L	113	(50-150)	50	2.0
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0259	ug/L	104	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0254	ug/L	102	(70-130)	30	2.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00216	ug/L	108	(50-150)		
MS_202008190528	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00227	ug/L	110	(50-150)		
MSD_202008190528	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00219	ug/L	106	(50-150)	50	3.7
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0269	ug/L	107	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0263	ug/L	105	(70-130)	30	2.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202008190528	Perfluorononanoic acid (PFNA)	ND	0.002	0.00219	ug/L	109	(50-150)		
MSD_202008190528	Perfluorononanoic acid (PFNA)	ND	0.002	0.00216	ug/L	107	(50-150)	50	1.6
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0249	ug/L	108	(70-130)	30	0.40
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00205	ug/L	111	(50-150)		
MS_202008190528	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00213	ug/L	106	(50-150)		
MSD_202008190528	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00217	ug/L	108	(50-150)	50	1.8
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0267	ug/L	107	(70-130)	30	1.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00233	ug/L	117	(50-150)		
MS_202008190528	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00230	ug/L	108	(50-150)		
MSD_202008190528	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00232	ug/L	109	(50-150)	50	0.68
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0262	ug/L	105	(70-130)	30	3.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00221	ug/L	111	(50-150)		
MS_202008190528	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00218	ug/L	106	(50-150)		
MSD_202008190528	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00210	ug/L	102	(50-150)	50	3.7

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0245	ug/L	98	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0246	ug/L	98	(70-130)	30	0.41
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00196	ug/L	98	(50-150)		
MS_202008190528	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00203	ug/L	101	(50-150)		
MSD_202008190528	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00200	ug/L	100	(50-150)	50	1.6
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0251	ug/L	100	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0253	ug/L	101	(70-130)	30	0.79
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00213	ug/L	106	(50-150)		
MS_202008190528	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00215	ug/L	107	(50-150)		
MSD_202008190528	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00210	ug/L	105	(50-150)	50	2.4

EPA Method 537.1 by EPA 537.1

Prep Batch: 1270278 Analytical Batch: 1271408

Analysis Date: 08/27/2020

DUP_202008200632	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0407	ug/L	87	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0431	ug/L	92	(70-130)	30	5.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00166	ug/L	88	(50-150)		
MS_202008200631	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00171	ug/L	91	(50-150)		
DUP_202008200632	13C2-PFDA (S)			102	%	102	(70-130)		
LCS3	13C2-PFDA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFDA (S)		100	122	%	122	(70-130)		
MBLK	13C2-PFDA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	101	%	101	(70-130)		
MS_202008200631	13C2-PFDA (S)		100	105	%	105	(70-130)		
DUP_202008200632	13C2-PFHxA (S)			107	%	107	(70-130)		
LCS3	13C2-PFHxA (S)		100	99.7	%	100	(70-130)		
LCS4	13C2-PFHxA (S)		100	121	%	121	(70-130)		
MBLK	13C2-PFHxA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MS_202008200631	13C2-PFHxA (S)		100	110	%	111	(70-130)		
DUP_202008200632	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008200631	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
DUP_202008200632	13C3-HFPO-DA (S)			102	%	102	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	96.9	%	97	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	112	%	112	(70-130)		
MBLK	13C3-HFPO-DA (S)			99.8	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	93.6	%	94	(70-130)		
MS_202008200631	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
DUP_202008200632	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	96.1	%	96	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.3	%	98	(50-150)		
MS_202008200631	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
DUP_202008200632	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0461	ug/L	95	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0465	ug/L	96	(70-130)	30	0.86
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00194	ug/L	103	(50-150)		
MS_202008200631	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00205	ug/L	108	(50-150)		
DUP_202008200632	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0459	ug/L	99	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0464	ug/L	100	(70-130)	30	1.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00195	ug/L	105	(50-150)		
MS_202008200631	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00181	ug/L	97	(50-150)		
DUP_202008200632	d3-NMeFOSAA (I)			100	%	100	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			106	%	106	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS_202008200631	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
DUP_202008200632	d5-NEtFOSAA (S)			103	%	103	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	95.0	%	95	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MBLK	d5-NEtFOSAA (S)			103	%	103	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
MS_202008200631	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
DUP_202008200632	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0467	ug/L	93	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0455	ug/L	91	(70-130)	30	2.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00194	ug/L	97	(50-150)		
MS_202008200631	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00217	ug/L	108	(50-150)		
DUP_202008200632	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0464	ug/L	93	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0466	ug/L	93	(70-130)	30	0.22
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00212	ug/L	106	(50-150)		
MS_202008200631	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00209	ug/L	103	(50-150)		
DUP_202008200632	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0489	ug/L	98	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0489	ug/L	98	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00214	ug/L	107	(50-150)		
MS_202008200631	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00221	ug/L	109	(50-150)		
DUP_202008200632	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0447	ug/L	101	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0455	ug/L	103	(70-130)	30	1.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00194	ug/L	110	(50-150)		
MS_202008200631	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00307	ug/L	108	(50-150)		
DUP_202008200632	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0499	ug/L	100	(70-130)	30	0.40
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202008200631	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00222	ug/L	103	(50-150)		
DUP_202008200632	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0460	ug/L	92	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0498	ug/L	100	(70-130)	30	7.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00193	ug/L	96	(50-150)		
MS_202008200631	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00198	ug/L	99	(50-150)		
DUP_202008200632	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0496	ug/L	99	(70-130)	30	0.0

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00217	ug/L	108	(50-150)		
MS_202008200631	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00228	ug/L	113	(50-150)		
DUP_202008200632	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0475	ug/L	104	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0476	ug/L	104	(70-130)	30	0.21
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00204	ug/L	112	(50-150)		
MS_202008200631	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00246	ug/L	109	(50-150)		
DUP_202008200632	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0495	ug/L	99	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0491	ug/L	98	(70-130)	30	0.81
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202008200631	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00219	ug/L	106	(50-150)		
DUP_202008200632	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0500	ug/L	100	(70-130)	30	1.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00208	ug/L	104	(50-150)		
MS_202008200631	Perfluorononanoic acid (PFNA)	ND	0.002	0.00249	ug/L	109	(50-150)		
DUP_202008200632	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0465	ug/L	101	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0472	ug/L	102	(70-130)	30	1.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00202	ug/L	109	(50-150)		
MS_202008200631	Perfluorooctanesulfonic acid (PFOS)	0.0020	0.0019	0.00384	ug/L	101	(50-150)		
DUP_202008200632	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0495	ug/L	99	(70-130)	30	1.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00223	ug/L	111	(50-150)		
MS_202008200631	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00235	ug/L	109	(50-150)		
DUP_202008200632	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0466	ug/L	93	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0488	ug/L	98	(70-130)	30	4.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00186	ug/L	93	(50-150)		

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008200631	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00189	ug/L	92	(50-150)		
DUP_202008200632	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0458	ug/L	92	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0492	ug/L	98	(70-130)	30	7.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00188	ug/L	94	(50-150)		
MS_202008200631	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00197	ug/L	98	(50-150)		
DUP_202008200632	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0463	ug/L	93	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0488	ug/L	98	(70-130)	30	5.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00199	ug/L	100	(50-150)		
MS_202008200631	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00212	ug/L	105	(50-150)		

Perchlorate by EPA 314.0

Analytical Batch: 1271723

Analysis Date: 08/28/2020

LCS1	Perchlorate		25	23.4	ug/L	94	(85-115)		
LCS2	Perchlorate		25	22.8	ug/L	91	(85-115)	15	2.6
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.68	ug/L	92	(75-125)		
MS_202008120353	Perchlorate	ND	25	20.7	ug/L	83	(80-120)		
MSD_202008120353	Perchlorate	ND	25	21.0	ug/L	84	(80-120)	15	1.4

EPA Method 537.1 by EPA 537.1

Prep Batch: 1271848 Analytical Batch: 1272407

Analysis Date: 09/01/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0443	ug/L	94	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)	30	9.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS2_202008270876	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0477	ug/L	101	(70-130)		
MSD2_202008270876	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0498	ug/L	106	(70-130)	30	4.3
LCS3	13C2-PFDA (S)		100	119	%	119	(70-130)		
LCS4	13C2-PFDA (S)		100	120	%	120	(70-130)		
MBLK	13C2-PFDA (S)			117	%	117	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	121	%	121	(70-130)		
MS2_202008270876	13C2-PFDA (S)		100	115	%	115	(70-130)		
MSD2_202008270876	13C2-PFDA (S)		100	118	%	118	(70-130)		
LCS3	13C2-PFHxA (S)		100	125	%	125	(70-130)		
LCS4	13C2-PFHxA (S)		100	124	%	124	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFHxA (S)			114	%	114	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	118	%	118	(70-130)		
MS2_202008270876	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MSD2_202008270876	13C2-PFHxA (S)		100	116	%	116	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.6	%	99	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.3	%	99	(50-150)		
MS2_202008270876	13C2-PFOA- IS#1 (I)		100	99.2	%	99	(50-150)		
MSD2_202008270876	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	114	%	114	(70-130)		
MBLK	13C3-HFPO-DA (S)			106	%	106	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
MS2_202008270876	13C3-HFPO-DA (S)		100	104	%	105	(70-130)		
MSD2_202008270876	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.5	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.7	%	98	(50-150)		
MS2_202008270876	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MSD2_202008270876	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0454	ug/L	94	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0491	ug/L	101	(70-130)	30	7.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS2_202008270876	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0473	ug/L	98	(70-130)		
MSD2_202008270876	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0474	ug/L	98	(70-130)	30	0.15
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0452	ug/L	97	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0482	ug/L	103	(70-130)	30	6.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00197	ug/L	106	(50-150)		
MS2_202008270876	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0472	ug/L	101	(70-130)		
MSD2_202008270876	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0492	ug/L	106	(70-130)	30	4.4
LCS3	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.5	%	100	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.4	%	99	(50-150)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202008270876	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MSD2_202008270876	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	114	%	115	(70-130)		
MBLK	d5-NEtFOSAA (S)			112	%	112	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		
MS2_202008270876	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MSD2_202008270876	d5-NEtFOSAA (S)		100	116	%	116	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0490	ug/L	98	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0526	ug/L	105	(70-130)	30	6.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00201	ug/L	101	(50-150)		
MS2_202008270876	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0478	ug/L	96	(70-130)		
MSD2_202008270876	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0491	ug/L	98	(70-130)	30	2.6
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0475	ug/L	95	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0524	ug/L	105	(70-130)	30	9.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	105	(50-150)		
MS2_202008270876	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0503	ug/L	101	(70-130)		
MSD2_202008270876	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0516	ug/L	103	(70-130)	30	2.6
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0493	ug/L	99	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0521	ug/L	104	(70-130)	30	5.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202008270876	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0509	ug/L	102	(70-130)		
MSD2_202008270876	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0520	ug/L	104	(70-130)	30	2.1
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0430	ug/L	97	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0458	ug/L	104	(70-130)	30	6.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00173	ug/L	98	(50-150)		
MS2_202008270876	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0390	ug/L	88	(70-130)		
MSD2_202008270876	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0428	ug/L	97	(70-130)	30	9.3
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0486	ug/L	97	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0536	ug/L	107	(70-130)	30	9.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00226	ug/L	113	(50-150)		
MS2_202008270876	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0541	ug/L	108	(70-130)		
MSD2_202008270876	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0533	ug/L	107	(70-130)	30	1.5

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 888431
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0537	ug/L	107	(70-130)	30	7.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00217	ug/L	109	(50-150)		
MS2_202008270876	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0552	ug/L	110	(70-130)		
MSD2_202008270876	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0521	ug/L	104	(70-130)	30	5.7
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0481	ug/L	96	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0514	ug/L	103	(70-130)	30	6.6
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00228	ug/L	114	(50-150)		
MS2_202008270876	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0506	ug/L	101	(70-130)		
MSD2_202008270876	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0492	ug/L	98	(70-130)	30	2.9
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0443	ug/L	97	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0474	ug/L	104	(70-130)	30	6.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00198	ug/L	108	(50-150)		
MS2_202008270876	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0471	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0477	ug/L	105	(70-130)	30	1.3
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0525	ug/L	105	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0546	ug/L	109	(70-130)	30	3.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00226	ug/L	113	(50-150)		
MS2_202008270876	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0495	ug/L	99	(70-130)		
MSD2_202008270876	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0495	ug/L	99	(70-130)	30	0.080
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0548	ug/L	110	(70-130)	30	7.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	115	(50-150)		
MS2_202008270876	Perfluorononanoic acid (PFNA)	ND	0.05	0.0531	ug/L	106	(70-130)		
MSD2_202008270876	Perfluorononanoic acid (PFNA)	ND	0.05	0.0524	ug/L	105	(70-130)	30	1.3
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0445	ug/L	96	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0486	ug/L	105	(70-130)	30	8.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00203	ug/L	110	(50-150)		
MS2_202008270876	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0476	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0490	ug/L	106	(70-130)	30	2.9
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0527	ug/L	105	(70-130)	30	6.1

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00229	ug/L	115	(50-150)		
MS2_202008270876	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0518	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0519	ug/L	103	(70-130)	30	0.26
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0478	ug/L	96	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0506	ug/L	101	(70-130)	30	5.7
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00251	ug/L	125	(50-150)		
MS2_202008270876	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0521	ug/L	104	(70-130)		
MSD2_202008270876	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0517	ug/L	103	(70-130)	30	0.72
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0515	ug/L	103	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0542	ug/L	108	(70-130)	30	5.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00225	ug/L	112	(50-150)		
MS2_202008270876	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0551	ug/L	110	(70-130)		
MSD2_202008270876	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0544	ug/L	109	(70-130)	30	1.3
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0530	ug/L	106	(70-130)	30	6.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00208	ug/L	104	(50-150)		
MS2_202008270876	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0529	ug/L	106	(70-130)		
MSD2_202008270876	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0530	ug/L	106	(70-130)	30	0.24

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 09/04/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 09/04/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 09/04/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 09/04/2020

Quant Report - Page 1 of 1

, Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-36626-1
Client Project/Site: 888431

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
8/26/2020 11:30:17 AM

Lori Thompson, Project Manager I
(714)895-5494
Lori.Thompson@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 888431

Job ID: 570-36626-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⊠	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 888431

Job ID: 570-36626-1

Job ID: 570-36626-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-36626-1

Comments

No additional comments.

Receipt

The samples were received on 8/24/2020 10:58 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.5° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-90243. LCS/LCSD were performed to meet QC requirements.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 888431

Job ID: 570-36626-1

Client Sample ID: 202008200220

Lab Sample ID: 570-36626-1

No Detections.

Client Sample ID: 202008200236

Lab Sample ID: 570-36626-2

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 888431

Job ID: 570-36626-1

General Chemistry

Client Sample ID: 202008200220

Date Collected: 08/20/20 08:57

Date Received: 08/24/20 10:58

Lab Sample ID: 570-36626-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.954	0.763	mg/L		08/25/20 14:54	08/25/20 14:54	1

Client Sample ID: 202008200236

Date Collected: 08/20/20 10:57

Date Received: 08/24/20 10:58

Lab Sample ID: 570-36626-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.966	0.773	mg/L		08/25/20 14:54	08/25/20 14:54	1

QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 888431

Job ID: 570-36626-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-90243/1-A
Matrix: Water
Analysis Batch: 90279

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 90243

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		08/25/20 14:54	08/25/20 14:54	1

Lab Sample ID: LCS 570-90243/2-A
Matrix: Water
Analysis Batch: 90279

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 90243

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.10		mg/L		93	78 - 114

Lab Sample ID: LCSD 570-90243/3-A
Matrix: Water
Analysis Batch: 90279

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 90243

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.80		mg/L		92	78 - 114	1	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 888431

Job ID: 570-36626-1

General Chemistry

Prep Batch: 90243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-36626-1	202008200220	Total/NA	Water	1664A	
570-36626-2	202008200236	Total/NA	Water	1664A	
MB 570-90243/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-90243/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-90243/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 90279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-36626-1	202008200220	Total/NA	Water	1664A	90243
570-36626-2	202008200236	Total/NA	Water	1664A	90243
MB 570-90243/1-A	Method Blank	Total/NA	Water	1664A	90243
LCS 570-90243/2-A	Lab Control Sample	Total/NA	Water	1664A	90243
LCSD 570-90243/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	90243

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 888431

Job ID: 570-36626-1

Client Sample ID: 202008200220

Lab Sample ID: 570-36626-1

Date Collected: 08/20/20 08:57

Matrix: Water

Date Received: 08/24/20 10:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1048 mL	1000 mL	90243	08/25/20 14:54	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			90279	08/25/20 14:54	UWEZ	ECL 1

Instrument ID: NOEQUIP

Client Sample ID: 202008200236

Lab Sample ID: 570-36626-2

Date Collected: 08/20/20 10:57

Matrix: Water

Date Received: 08/24/20 10:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1035 mL	1000 mL	90243	08/25/20 14:54	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			90279	08/25/20 14:54	UWEZ	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 888431

Job ID: 570-36626-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 888431

Job ID: 570-36626-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 888431

Job ID: 570-36626-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-36626-1	202008200220	Water	08/20/20 08:57	08/24/20 10:58	
570-36626-2	202008200236	Water	08/20/20 10:57	08/24/20 10:58	

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36626
Date: 8/24/2020

Submittal Form

***REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**
Report & Invoice must have the Folder # 888431 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.
Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: us20_subcontract@eurofins.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the
Specified State Certification # and
Exp Date for requested tests + matrix.
Samples from: CALIFORNIA



Eaton Analytical

Ship To:

Eurofins CalScience
7440 Lincoln Way

Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 888431
Report Due: 09/03/2020

Sample ID: 202008200220 Client Sample ID for reference onl
LH-INF-20200820

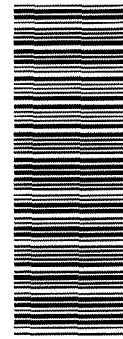
Sample type: EPA 1664 Method: EPA 1664
Sample Event: Oil and Grease by 1664(subbed)

Prep Method: Analysis Requested
Sample Date & Time Matrix: 08/20/20 0857 DW PWS Systemcode: JLS
PWSID: JLS

Sample ID: 202008200236 Client Sample ID for reference onl
MB-INF-20200820

Sample type: EPA 1664 Method: EPA 1664
Sample Event: Oil and Grease by 1664(subbed)

Prep Method: Analysis Requested
Sample Date & Time Matrix: 08/20/20 1057 DW PWS Systemcode: JLS
PWSID: JLS



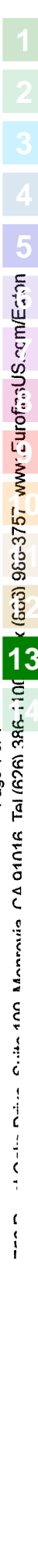
570-36626 Chain of Custody

Relinquished by: [Signature] Date: 8/24/20 Time: 1058
Received by: [Signature] Date: 8/24/2020 Time: 1058
Relinquished by: [Signature] Date: _____ Time: _____
Received by: _____ Date: _____ Time: _____

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

1-9/15/20



Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-36626-1

Login Number: 36626
List Number: 1
Creator: Soriano, Precy

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 889747
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 889747
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **August 27, 2020 at 1133**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202008270372</u>	GAC-1M-20200827 Static ID: 537.1 @537.1	08/27/2020 0733
<u>202008270373</u>	GAC-2M-20200827 Static ID: 537.1 @537.1	08/27/2020 0736
<u>202008270374</u>	GAC-3M-20200827 Static ID: 537.1 @537.1	08/27/2020 0739
<u>202008270375</u>	GAC-4M-20200827 Static ID: 537.1 @537.1	08/27/2020 0742
<u>202008270376</u>	IX-1M-20200827 Static ID: 537.1 @537.1	08/27/2020 0745
<u>202008270377</u>	IX-2M-20200827 Static ID: 537.1 @537.1	08/27/2020 0748
<u>202008270378</u>	IX-3M-20200827 Static ID: 537.1 @537.1	08/27/2020 0751
<u>202008270379</u>	IX-4M-20200827 Static ID: 537.1 @537.1	08/27/2020 0754
<u>202008270380</u>	LH-INF-20200827 Static ID: 537.1 @537.1 Chloride @ANIONS48 Sulfate Alkalinity in CaCO3 units Total Organic Carbon	08/27/2020 0757
<u>202008270381</u>	LH-INF-DUP-20200827 Static ID: 537.1 @537.1	08/27/2020 0800
<u>202008270382</u>	GAC-5M-20200827	08/27/2020 0933

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 889747
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **August 27, 2020 at 1133**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	Static ID: 537.1	
	@537.1	
<u>202008270383</u>	GAC-6M-20200827	08/27/2020 0936
	Static ID: 537.1	
	@537.1	
<u>202008270384</u>	GAC-7M-20200827	08/27/2020 0939
	Static ID: 537.1	
	@537.1	
<u>202008270385</u>	GAC-8M-20200827	08/27/2020 0942
	Static ID: 537.1	
	@537.1	
<u>202008270386</u>	IX-5M-20200827	08/27/2020 0945
	Static ID: 537.1	
	@537.1	
<u>202008270387</u>	IX-6M-20200827	08/27/2020 0948
	Static ID: 537.1	
	@537.1	
<u>202008270388</u>	IX-7M-20200827	08/27/2020 0951
	Static ID: 537.1	
	@537.1	
<u>202008270389</u>	IX-8M-20200827	08/27/2020 0954
	Static ID: 537.1	
	@537.1	
<u>202008270392</u>	MB-INF-20200827	08/27/2020 0957
	@537.1	
	Chloride	@ANIONS48 Alkalinity in CaCO3 units
		Sulfate Total Organic Carbon
<u>202008270395</u>	FB-HOLD-20200827	08/27/2020 1000
	@537.1 FB	

Test Description

@537.1 -- EPA Method 537.1

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 889747
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

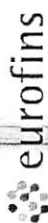
Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **August 27, 2020 at 1133**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1 FB -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	

889747

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot										
LABORATORY: Eurofins Eaton Analytical (949) 679-1070 E-MAIL: mjeon@gsi-net.com		PROJECT CONTACT: Miae Jeon GLOBAL ID:										
TEL: (949) 679-1070		PROJECT NO.: 5302										
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) RDT										
REQUESTED ANALYSES Please check box or fill in blank as needed.												
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1 M-20200827	8-27	0733	Water	2		X					
	GAC-2 M-20200827	8-27	0736	Water	2		X					
	GAC-3 M-20200827	8-27	0739	Water	2		X					
	GAC-4 M-20200827	8-27	0742	Water	2		X					
	IX-1 M-20200827	8-27	0745	Water	2		X					
	IX-2 M-20200827	8-27	0746	Water	2		X					
	IX-3 M-20200827	8-27	0751	Water	2		X					
	IX-4 M-20200827	8-27	0754	Water	2		X					
	LH-INF-20200827	8-27	0757	Water	5	23	X			X		
	LH-INF-DUP-20200827	8-27	0800	Water	2	2	X					
	GAC-5 M-20200827	8-27	0933	Water	2		X					
	GAC-6 M-20200827	8-27	0936	Water	2		X					
	GAC-7 M-20200827	8-27	0939	Water	2		X					
	GAC-8 M-20200827	8-27	0942	Water	2		X					
Relinquished by: (Signature) <i>Yuan</i>						Received by: (Signature) <i>[Signature]</i>		Date: 8-27-20		Time: 11:37		
Relinquished by: (Signature)						Received by: (Signature)		Date:		Time:		
Relinquished by: (Signature)						Received by: (Signature)		Date:		Time:		



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 889747

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6309 (Observation = 3.4 °C) (Corr. Factor = 0.2 °C) (Final = 3.2 °C)

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C. not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA and Radon Headspace: No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Sample ID	Bottle #	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY:	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
		FLORENT GUILLET	Eurofins Eaton Analytical	8-27-70	139

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202008270376 <u>IX-1M-20200827</u>						
08/31/2020 19:22	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
08/31/2020 19:22	Perfluorooctanoic acid (PFOA)		0.0048		ug/L	0.0020
202008270377 <u>IX-2M-20200827</u>						
08/31/2020 19:41	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
08/31/2020 19:41	Perfluorooctanoic acid (PFOA)		0.0045		ug/L	0.0020
202008270378 <u>IX-3M-20200827</u>						
08/31/2020 21:48	Perfluorohexanoic acid (PFHxA)		0.0022		ug/L	0.0020
08/31/2020 21:48	Perfluorooctanoic acid (PFOA)		0.0044		ug/L	0.0020
202008270379 <u>IX-4M-20200827</u>						
08/31/2020 21:57	Perfluorohexanoic acid (PFHxA)		0.0022		ug/L	0.0020
08/31/2020 21:57	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
202008270380 <u>LH-INF-20200827</u>						
08/29/2020 01:02	Alkalinity in CaCO3 units		200		mg/L	2.0
08/27/2020 19:37	Chloride		110	250	mg/L	2.5
08/27/2020 19:37	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
08/27/2020 19:37	Nitrate as NO3 (calc)		12	45	mg/L	2.2
08/31/2020 22:07	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
08/31/2020 22:07	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
08/31/2020 22:07	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
08/31/2020 22:07	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
08/31/2020 22:07	Perfluorooctanesulfonic acid (PFOS)		0.033		ug/L	0.0020
08/31/2020 22:07	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
08/27/2020 19:37	Sulfate		180	250	mg/L	2.5
08/27/2020 19:37	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
09/04/2020 19:12	Total Organic Carbon		0.74		mg/L	0.20
202008270381 <u>LH-INF-DUP-20200827</u>						
08/31/2020 22:17	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
08/31/2020 22:17	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
08/31/2020 22:17	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
08/31/2020 22:17	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
08/31/2020 22:17	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
08/31/2020 22:17	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
202008270382 <u>GAC-5M-20200827</u>						

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
08/31/2020 22:26	Perfluorobutanesulfonic acid (PFBS)		0.0068		ug/L	0.0020
08/31/2020 22:26	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
08/31/2020 22:26	Perfluorohexanesulfonic acid (PFHxS)		0.0020		ug/L	0.0020
08/31/2020 22:26	Perfluorohexanoic acid (PFHxA)		0.0052		ug/L	0.0020
08/31/2020 22:26	Perfluorooctanesulfonic acid (PFOS)		0.0066		ug/L	0.0020
08/31/2020 22:26	Perfluorooctanoic acid (PFOA)		0.0076		ug/L	0.0020
		202008270383	<u>GAC-6M-20200827</u>			
08/31/2020 22:36	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
08/31/2020 22:36	Perfluoroheptanoic acid (PFHpA)		0.0024		ug/L	0.0020
08/31/2020 22:36	Perfluorohexanoic acid (PFHxA)		0.0061		ug/L	0.0020
08/31/2020 22:36	Perfluorooctanoic acid (PFOA)		0.0030		ug/L	0.0020
		202008270384	<u>GAC-7M-20200827</u>			
09/01/2020 01:31	Perfluorobutanesulfonic acid (PFBS)		0.0083		ug/L	0.0020
09/01/2020 01:31	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
09/01/2020 01:31	Perfluorohexanesulfonic acid (PFHxS)		0.0025		ug/L	0.0020
09/01/2020 01:31	Perfluorohexanoic acid (PFHxA)		0.0052		ug/L	0.0020
09/01/2020 01:31	Perfluorooctanesulfonic acid (PFOS)		0.0051		ug/L	0.0020
09/01/2020 01:31	Perfluorooctanoic acid (PFOA)		0.0072		ug/L	0.0020
		202008270385	<u>GAC-8M-20200827</u>			
09/01/2020 01:40	Perfluorobutanesulfonic acid (PFBS)		0.0050		ug/L	0.0020
09/01/2020 01:40	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
09/01/2020 01:40	Perfluorooctanesulfonic acid (PFOS)		0.0048		ug/L	0.0020
09/01/2020 01:40	Perfluorooctanoic acid (PFOA)		0.0047		ug/L	0.0020
		202008270386	<u>IX-5M-20200827</u>			
09/01/2020 18:11	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
09/01/2020 18:11	Perfluorooctanoic acid (PFOA)		0.0046		ug/L	0.0020
		202008270387	<u>IX-6M-20200827</u>			
09/01/2020 18:32	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
09/01/2020 18:32	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
09/01/2020 18:32	Perfluorooctanoic acid (PFOA)		0.0063		ug/L	0.0020
		202008270388	<u>IX-7M-20200827</u>			
09/01/2020 18:43	Perfluoroheptanoic acid (PFHpA)		0.0030		ug/L	0.0020
09/01/2020 18:43	Perfluorohexanoic acid (PFHxA)		0.0050		ug/L	0.0020
09/01/2020 18:43	Perfluorooctanoic acid (PFOA)		0.0075		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202008270389	<u>IX-8M-20200827</u>				
09/01/2020 18:52	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
09/01/2020 18:52	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
09/01/2020 18:52	Perfluorooctanoic acid (PFOA)		0.0052		ug/L	0.0020
	202008270392	<u>MB-INF-20200827</u>				
08/29/2020 00:55	Alkalinity in CaCO3 units		170		mg/L	2.0
08/27/2020 20:16	Chloride		48	250	mg/L	2.5
08/27/2020 20:16	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
08/27/2020 20:16	Nitrate as NO3 (calc)		11	45	mg/L	2.2
09/01/2020 19:02	Perfluorobutanesulfonic acid (PFBS)		0.0092		ug/L	0.0020
09/01/2020 19:02	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
09/01/2020 19:02	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
09/01/2020 19:02	Perfluorohexanoic acid (PFHxA)		0.0055		ug/L	0.0020
09/01/2020 19:02	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
09/01/2020 19:02	Perfluorooctanesulfonic acid (PFOS)		0.036		ug/L	0.0020
09/01/2020 19:02	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
08/27/2020 20:16	Sulfate		77	250	mg/L	2.5
08/27/2020 20:16	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
09/04/2020 19:34	Total Organic Carbon		0.80		mg/L	0.20

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1M-20200827 (202008270372)					Sampled on 08/27/2020 0733				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	13C2-PFDA	105	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	13C2-PFHxA	101	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	94	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/28/20	08/31/20 20:57	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	96	%		1

GAC-2M-20200827 (202008270373)					Sampled on 08/27/2020 0736				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	13C2-PFDA	101	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	13C2-PFHxA	98	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/28/20	08/31/20 21:07	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	99	%		1

GAC-3M-20200827 (202008270374)

Sampled on 08/27/2020 0739

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	13C2-PFDA	101	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	13C2-PFHxA	100	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/28/20	08/31/20 21:27	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	96	%		1

GAC-4M-20200827 (202008270375)

Sampled on 08/27/2020 0742

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	13C2-PFDA	100	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	13C2-PFHxA	98	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	91	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/28/20	08/31/20 21:38	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	98	%		1

IX-1M-20200827 (202008270376)

Static ID: 537.1

Sampled on 08/27/2020 0745

EPA 537.1 - EPA Method 537.1

08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0048	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	13C2-PFDA	105	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	13C2-PFHxA	101	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	98	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	103	%		1
08/28/20	08/31/20 19:22	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	100	%		1

IX-2M-20200827 (202008270377)

Sampled on 08/27/2020 0748

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0045	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	13C2-PFDA	107	%		1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	13C2-PFHxA	101	%		1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	96	%		1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	107	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 19:41	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	99	%		1
IX-3M-20200827 (202008270378)						Sampled on 08/27/2020 0751			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0044	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	13C2-PFDA	103	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	13C2-PFHxA	98	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/28/20	08/31/20 21:48	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	94	%		1

IX-4M-20200827 (202008270379)

Sampled on 08/27/2020 0754

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	13C2-PFDA	105	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	13C2-PFHxA	99	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	97	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/28/20	08/31/20 21:57	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	98	%		1

LH-INF-20200827 (202008270380)

Sampled on 08/27/2020 0757

Static ID: 537.1

SM 5310C - Total Organic Carbon

09/04/20 19:12	1272641	(SM 5310C)	Total Organic Carbon	0.74	mg/L	0.20	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

08/27/20 19:37	1271284	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
08/27/20 19:37	1271284	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
08/27/20 19:37	1271284	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/27/20 19:37	1271284	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

08/27/20 19:37	1271283	(EPA 300.0)	Chloride	110	mg/L	2.5	5
08/27/20 19:37	1271283	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.033	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	13C2-PFDA	102	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	13C2-PFHxA	99	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	95	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	108	%		1
08/28/20	08/31/20 22:07	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	97	%		1

SM 2320B - Alkalinity in CaCO3 units

08/29/20 01:02	1271602	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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LH-INF-DUP-20200827 (202008270381)

Sampled on 08/27/2020 0800

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	13C2-PFDA	106	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	13C2-PFHxA	100	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	105	%		1
08/28/20	08/31/20 22:17	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-5M-20200827 (202008270382)

Sampled on 08/27/2020 0933

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0068	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0020	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0052	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0066	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0076	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	13C2-PFDA	107	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	13C2-PFHxA	101	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	97	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	110	%		1
08/28/20	08/31/20 22:26	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	100	%		1

GAC-6M-20200827 (202008270383)

Sampled on 08/27/2020 0936

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0024	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0061	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0030	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	13C2-PFDA	106	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	13C2-PFHxA	99	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	13C3-HFPO-DA	93	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/28/20	08/31/20 22:36	1271390	1272045	(EPA 537.1)	d5-NEtFOSAA	100	%		1

GAC-7M-20200827 (202008270384)

Sampled on 08/27/2020 0939

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0083	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0025	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0052	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0051	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0072	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	13C2-PFDA	116	%		1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	13C2-PFHxA	108	%		1

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	13C3-HFPO-DA	104	%		1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	d3-NMeFOSAA	107	%		1
08/28/20	09/01/20 01:31	1271540	1272049	(EPA 537.1)	d5-NEtFOSAA	108	%		1
GAC-8M-20200827 (202008270385)					Sampled on 08/27/2020 0942				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0050	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0048	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0047	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	13C2-PFDA	117	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	13C2-PFHxA	112	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	13C3-HFPO-DA	107	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	d3-NMeFOSAA	108	%		1
08/28/20	09/01/20 01:40	1271540	1272049	(EPA 537.1)	d5-NEtFOSAA	108	%		1

IX-5M-20200827 (202008270386)

Sampled on 08/27/2020 0945

Static ID: 537.1

Rounding on totals after summation.
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Water Replenishment District
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 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0046	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	13C2-PFDA	121	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	13C2-PFHxA	122	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	114	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	106	%		1
08/31/20	09/01/20 18:11	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	117	%		1

IX-6M-20200827 (202008270387)

Sampled on 08/27/2020 0948

Static ID: 537.1

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0063	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	13C2-PFDA	118	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	13C2-PFHxA	115	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	112	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/31/20	09/01/20 18:32	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	116	%		1

IX-7M-20200827 (202008270388)

Sampled on 08/27/2020 0951

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0030	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0050	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0075	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	13C2-PFDA	124	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	13C2-PFHxA	117	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	112	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	104	%		1
08/31/20	09/01/20 18:43	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	116	%		1

IX-8M-20200827 (202008270389)

Sampled on 08/27/2020 0954

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0052	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	13C2-PFDA	121	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	13C2-PFHxA	117	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	112	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	108	%		1
08/31/20	09/01/20 18:52	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	116	%		1

MB-INF-20200827 (202008270392)

Sampled on 08/27/2020 0957

SM 5310C - Total Organic Carbon

09/04/20 19:34	1272641	(SM 5310C)	Total Organic Carbon	0.80	mg/L	0.20	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

08/27/20 20:16	1271284	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5
08/27/20 20:16	1271284	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
08/27/20 20:16	1271284	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
08/27/20 20:16	1271284	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

08/27/20 20:16	1271283	(EPA 300.0)	Chloride	48	mg/L	2.5	5
08/27/20 20:16	1271283	(EPA 300.0)	Sulfate	77	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0092	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0055	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.036	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	13C2-PFDA	111	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	13C2-PFHxA	113	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	13C3-HFPO-DA	106	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	d3-NMeFOSAA	108	%		1
08/31/20	09/01/20 19:02	1271848	1272407	(EPA 537.1)	d5-NEtFOSAA	109	%		1
SM 2320B - Alkalinity in CaCO3 units									
	08/29/20 00:55		1271602	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

FB-HOLD-20200827 (202008270395)

Sampled on 08/27/2020 1000

EPA 537.1 - EPA Method 537.1

09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

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Report: 889747
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 08/27/2020 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	13C2-PFDA	103	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	13C2-PFHxA	102	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	13C3-HFPO-DA	99	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	d3-NMeFOSAA	102	%		1
09/03/20	09/04/20 18:06	1272516	1273300	(EPA 537.1)	d5-NEtFOSAA	101	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 889747
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1271283

202008270380 LH-INF-20200827
 202008270392 MB-INF-20200827

Analysis Date: 08/27/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1271284

202008270380 LH-INF-20200827
 202008270392 MB-INF-20200827

Analysis Date: 08/27/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Alkalinity in CaCO3 units

Analytical Batch: 1271602

202008270380 LH-INF-20200827
 202008270392 MB-INF-20200827

Analysis Date: 08/29/2020

Analyzed by: ZS6I
 Analyzed by: ZS6I

EPA Method 537.1

Prep Batch: 1271390 Analytical Batch: 1272045

202008270372 GAC-1M-20200827
 202008270373 GAC-2M-20200827
 202008270374 GAC-3M-20200827
 202008270375 GAC-4M-20200827
 202008270376 IX-1M-20200827
 202008270377 IX-2M-20200827
 202008270378 IX-3M-20200827
 202008270379 IX-4M-20200827
 202008270380 LH-INF-20200827
 202008270381 LH-INF-DUP-20200827
 202008270382 GAC-5M-20200827
 202008270383 GAC-6M-20200827

Analysis Date: 08/31/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
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 Analyzed by: KAM
 Analyzed by: KAM

EPA Method 537.1

Prep Batch: 1271540 Analytical Batch: 1272049

202008270384 GAC-7M-20200827
 202008270385 GAC-8M-20200827

Analysis Date: 09/01/2020

Analyzed by: KAM
 Analyzed by: KAM

EPA Method 537.1

Prep Batch: 1271848 Analytical Batch: 1272407

202008270386 IX-5M-20200827
 202008270387 IX-6M-20200827
 202008270388 IX-7M-20200827
 202008270389 IX-8M-20200827
 202008270392 MB-INF-20200827

Analysis Date: 09/01/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

Total Organic Carbon

Analytical Batch: 1272641

202008270380 LH-INF-20200827
 202008270392 MB-INF-20200827

Analysis Date: 09/04/2020

Analyzed by: ZB2Z
 Analyzed by: ZB2Z



Eaton Analytical

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Laboratory QC Summary

Report: 889747
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

EPA Method 537.1

Prep Batch: 1272516 Analytical Batch: 1273300
202008270395 FB-HOLD-20200827

Analysis Date: 09/04/2020
Analyzed by: KAM

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1271283					Analysis Date: 08/27/2020				
LCS1	Chloride		25	26.9	mg/L	108	(90-110)		
LCS2	Chloride		25	26.9	mg/L	108	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.447	mg/L	89	(50-150)		
MS_202008270380	Chloride	110	65	178	mg/L	110	(80-120)		
MS_202008270842	Chloride	300	130	426	mg/L	103	(80-120)		
MSD_202008270380	Chloride	110	65	178	mg/L	110	(80-120)	20	0.14
MSD_202008270842	Chloride	300	130	429	mg/L	105	(80-120)	20	0.63
LCS1	Sulfate		50	52.8	mg/L	106	(90-110)		
LCS2	Sulfate		50	52.8	mg/L	106	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.969	mg/L	97	(50-150)		
MRLLW	Sulfate		0.25	0.234	mg/L	94	(50-150)		
MS_202008270380	Sulfate	180	125	316	mg/L	110	(80-120)		
MS_202008270842	Sulfate	200	250	478	mg/L	111	(80-120)		
MSD_202008270380	Sulfate	180	125	317	mg/L	110	(80-120)	20	0.15
MSD_202008270842	Sulfate	200	250	482	mg/L	113	(80-120)	20	0.85
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1271284					Analysis Date: 08/27/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.57	mg/L	103	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.58	mg/L	103	(90-110)	20	0.39
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0459	mg/L	92	(50-150)		
MRLLW	Nitrate as Nitrogen by IC		0.013	0.0109	mg/L	87	(50-150)		
MS_202008270380	Nitrate as Nitrogen by IC	2.8	6.5	9.51	mg/L	107	(80-120)		
MS_202008270842	Nitrate as Nitrogen by IC	31	13	44.2	mg/L	107	(80-120)		
MSD_202008270380	Nitrate as Nitrogen by IC	2.8	6.5	9.53	mg/L	108	(80-120)	20	0.17
MSD_202008270842	Nitrate as Nitrogen by IC	31	13	44.5	mg/L	110	(80-120)	20	0.60
LCS1	Nitrite Nitrogen by IC		1	1.01	mg/L	101	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.01	mg/L	101	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0455	mg/L	91	(50-150)		
MRLLW	Nitrite Nitrogen by IC		0.013	0.0123	mg/L	98	(50-150)		
MS_202008270380	Nitrite Nitrogen by IC	ND	2.5	2.47	mg/L	99	(80-120)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008270842	Nitrite Nitrogen by IC	ND	5	4.94	mg/L	99	(80-120)		
MSD_202008270380	Nitrite Nitrogen by IC	ND	2.5	2.47	mg/L	99	(80-120)	20	0.045
MSD_202008270842	Nitrite Nitrogen by IC	ND	5	4.98	mg/L	100	(80-120)	20	0.98

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1271602

Analysis Date: 08/28/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)	20	0.0
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.85	mg/L	93	(50-150)		
MS_202008260519	Alkalinity in CaCO3 units	160	100	204	mg/L	<u>41</u>	(80-120)		
MS_202008260522	Alkalinity in CaCO3 units	280	100	314	mg/L	<u>32</u>	(80-120)		
MSD_202008260519	Alkalinity in CaCO3 units	160	100	200	mg/L	<u>37</u>	(80-120)	20	2.1
MSD_202008260522	Alkalinity in CaCO3 units	280	100	311	mg/L	<u>30</u>	(80-120)	20	0.81

EPA Method 537.1 by EPA 537.1

Prep Batch: 1271390 Analytical Batch: 1272045

Analysis Date: 08/31/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008270377	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0487	ug/L	103	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0482	ug/L	102	(70-130)	30	1.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00203	ug/L	108	(50-150)		
MS_202008270376	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00210	ug/L	112	(50-150)		
DUP_202008270377	13C2-PFDA (S)			103	%	103	(70-130)		
LCS3	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS4	13C2-PFDA (S)		100	104	%	104	(70-130)		
MBLK	13C2-PFDA (S)			105	%	105	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	103	%	103	(70-130)		
MS_202008270376	13C2-PFDA (S)		100	105	%	105	(70-130)		
DUP_202008270377	13C2-PFHxA (S)			99.4	%	99	(70-130)		
LCS3	13C2-PFHxA (S)		100	103	%	103	(70-130)		
LCS4	13C2-PFHxA (S)		100	104	%	104	(70-130)		
MBLK	13C2-PFHxA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MS_202008270376	13C2-PFHxA (S)		100	101	%	101	(70-130)		
DUP_202008270377	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.7	%	99	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	98.0	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.3	%	98	(50-150)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MS_202008270376	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
DUP_202008270377	13C3-HFPO-DA (S)			97.8	%	98	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	96.0	%	96	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	94.0	%	94	(70-130)		
MBLK	13C3-HFPO-DA (S)			95.8	%	96	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	91.0	%	91	(70-130)		
MS_202008270376	13C3-HFPO-DA (S)		100	98.1	%	98	(70-130)		
DUP_202008270377	13C4-PFOS- IS#2 (I)			99.0	%	99	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	98.6	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.6	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.1	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.1	%	98	(50-150)		
MS_202008270376	13C4-PFOS- IS#2 (I)		100	97.3	%	97	(50-150)		
DUP_202008270377	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0493	ug/L	102	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0496	ug/L	102	(70-130)	30	0.61
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS_202008270376	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00218	ug/L	115	(50-150)		
DUP_202008270377	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0464	ug/L	100	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0459	ug/L	99	(70-130)	30	1.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00194	ug/L	104	(50-150)		
MS_202008270376	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00197	ug/L	106	(50-150)		
DUP_202008270377	d3-NMeFOSAA (I)			107	%	107	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MBLK	d3-NMeFOSAA (I)			101	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS_202008270376	d3-NMeFOSAA (I)		100	106	%	107	(50-150)		
DUP_202008270377	d5-NEtFOSAA (S)			92.7	%	93	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	95.1	%	95	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	97.4	%	97	(70-130)		
MBLK	d5-NEtFOSAA (S)			96.6	%	97	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	96.9	%	97	(70-130)		
MS_202008270376	d5-NEtFOSAA (S)		100	96.2	%	96	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 889747
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202008270377	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0498	ug/L	100	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0496	ug/L	99	(70-130)	30	0.40
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00194	ug/L	97	(50-150)		
MS_202008270376	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00219	ug/L	110	(50-150)		
DUP_202008270377	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0490	ug/L	98	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0504	ug/L	101	(70-130)	30	2.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS_202008270376	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00212	ug/L	106	(50-150)		
DUP_202008270377	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0492	ug/L	98	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0507	ug/L	101	(70-130)	30	3.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS_202008270376	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00213	ug/L	106	(50-150)		
DUP_202008270377	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0469	ug/L	106	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0454	ug/L	103	(70-130)	30	3.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00194	ug/L	109	(50-150)		
MS_202008270376	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00250	ug/L	97	(50-150)		
DUP_202008270377	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0525	ug/L	105	(70-130)	30	1.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00225	ug/L	112	(50-150)		
MS_202008270376	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00257	ug/L	115	(50-150)		
DUP_202008270377	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0502	ug/L	100	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0511	ug/L	102	(70-130)	30	1.8
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202008270376	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00201	ug/L	100	(50-150)		
DUP_202008270377	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0529	ug/L	106	(70-130)		

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Report: 889747
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0530	ug/L	106	(70-130)	30	0.19
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00229	ug/L	114	(50-150)		
MS_202008270376	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00319	ug/L	115	(50-150)		
DUP_202008270377	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0470	ug/L	103	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0478	ug/L	105	(70-130)	30	1.7
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00200	ug/L	110	(50-150)		
MS_202008270376	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00249	ug/L	114	(50-150)		
DUP_202008270377	Perfluorohexanoic acid (PFHxA)	0.0026		0.00261	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0527	ug/L	105	(70-130)	30	0.57
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00217	ug/L	109	(50-150)		
MS_202008270376	Perfluorohexanoic acid (PFHxA)	0.0020	0.002	0.00409	ug/L	102	(50-150)		
DUP_202008270377	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0553	ug/L	111	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0551	ug/L	110	(70-130)	30	0.36
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202008270376	Perfluorononanoic acid (PFNA)	ND	0.002	0.00326	ug/L	119	(50-150)		
DUP_202008270377	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0492	ug/L	106	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0483	ug/L	104	(70-130)	30	1.9
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00208	ug/L	113	(50-150)		
MS_202008270376	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00368	ug/L	107	(50-150)		
DUP_202008270377	Perfluorooctanoic acid (PFOA)	0.0045		0.00445	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0540	ug/L	108	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0536	ug/L	107	(70-130)	30	0.74
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202008270376	Perfluorooctanoic acid (PFOA)	0.0048	0.002	0.00711	ug/L	116	(50-150)		
DUP_202008270377	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0544	ug/L	109	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0556	ug/L	111	(70-130)	30	2.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00240	ug/L	120	(50-150)		
MS_202008270376	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00256	ug/L	118	(50-150)		
DUP_202008270377	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0505	ug/L	101	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0547	ug/L	109	(70-130)	30	8.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202008270376	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00227	ug/L	114	(50-150)		
DUP_202008270377	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0552	ug/L	110	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0527	ug/L	105	(70-130)	30	4.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00213	ug/L	106	(50-150)		
MS_202008270376	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00214	ug/L	105	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1271540 Analytical Batch: 1272049

Analysis Date: 08/31/2020

DUP_202008280286	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0286	ug/L	122	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0279	ug/L	119	(70-130)	30	2.5
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00205	ug/L	109	(50-150)		
MS_202008280287	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00199	ug/L	106	(50-150)		
DUP_202008280286	13C2-PFDA (S)			114	%	114	(70-130)		
LCS1	13C2-PFDA (S)		100	111	%	111	(70-130)		
LCS2	13C2-PFDA (S)		100	118	%	118	(70-130)		
MBLK	13C2-PFDA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	116	%	116	(70-130)		
MS_202008280287	13C2-PFDA (S)		100	113	%	113	(70-130)		
DUP_202008280286	13C2-PFHxA (S)			108	%	108	(70-130)		
LCS1	13C2-PFHxA (S)		100	106	%	107	(70-130)		
LCS2	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	109	%	109	(70-130)		
MS_202008280287	13C2-PFHxA (S)		100	107	%	107	(70-130)		
DUP_202008280286	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MS_202008280287	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
DUP_202008280286	13C3-HFPO-DA (S)			104	%	104	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	99.7	%	100	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MBLK	13C3-HFPO-DA (S)			104	%	104	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MS_202008280287	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
DUP_202008280286	13C4-PFOS- IS#2 (I)			98.1	%	98	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	96.3	%	96	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			97.8	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.6	%	98	(50-150)		
MS_202008280287	13C4-PFOS- IS#2 (I)		100	97.3	%	97	(50-150)		
DUP_202008280286	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0260	ug/L	110	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0257	ug/L	109	(70-130)	30	1.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00201	ug/L	106	(50-150)		
MS_202008280287	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00194	ug/L	103	(50-150)		
DUP_202008280286	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0263	ug/L	113	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0261	ug/L	112	(70-130)	30	0.76
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00191	ug/L	103	(50-150)		
MS_202008280287	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00190	ug/L	102	(50-150)		
DUP_202008280286	d3-NMeFOSAA (I)			107	%	107	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MBLK	d3-NMeFOSAA (I)			106	%	106	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
MS_202008280287	d3-NMeFOSAA (I)		100	108	%	108	(50-150)		
DUP_202008280286	d5-NEtFOSAA (S)			107	%	107	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MBLK	d5-NEtFOSAA (S)			106	%	106	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202008280287	d5-NEFOSAA (S)		100	107	%	107	(70-130)		
DUP_202008280286	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0261	ug/L	105	(70-130)	30	1.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00195	ug/L	98	(50-150)		
MS_202008280287	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00200	ug/L	100	(50-150)		
DUP_202008280286	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0283	ug/L	113	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0278	ug/L	111	(70-130)	30	1.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	104	(50-150)		
MS_202008280287	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00204	ug/L	102	(50-150)		
DUP_202008280286	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0283	ug/L	113	(70-130)	30	2.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	107	(50-150)		
MS_202008280287	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00208	ug/L	104	(50-150)		
DUP_202008280286	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0250	ug/L	113	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0245	ug/L	111	(70-130)	30	2.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00187	ug/L	106	(50-150)		
MS_202008280287	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00205	ug/L	105	(50-150)		
DUP_202008280286	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0301	ug/L	121	(70-130)	30	3.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00229	ug/L	114	(50-150)		
MS_202008280287	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202008280286	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0297	ug/L	119	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0295	ug/L	118	(70-130)	30	0.68
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202008280287	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00211	ug/L	105	(50-150)		
DUP_202008280286	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0278	ug/L	111	(70-130)	30	1.8
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00221	ug/L	110	(50-150)		
MS_202008280287	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00228	ug/L	104	(50-150)		
DUP_202008280286	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0261	ug/L	114	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0261	ug/L	114	(70-130)	30	0.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00186	ug/L	102	(50-150)		
MS_202008280287	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00190	ug/L	104	(50-150)		
DUP_202008280286	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0278	ug/L	111	(70-130)	30	0.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202008280287	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00278	ug/L	106	(50-150)		
DUP_202008280286	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0293	ug/L	117	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0301	ug/L	121	(70-130)	30	2.7
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00237	ug/L	119	(50-150)		
MS_202008280287	Perfluorononanoic acid (PFNA)	ND	0.002	0.00227	ug/L	113	(50-150)		
DUP_202008280286	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0274	ug/L	118	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0273	ug/L	118	(70-130)	30	0.37
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00209	ug/L	113	(50-150)		
MS_202008280287	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00213	ug/L	109	(50-150)		
DUP_202008280286	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0292	ug/L	117	(70-130)	30	0.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00229	ug/L	114	(50-150)		
MS_202008280287	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00236	ug/L	109	(50-150)		
DUP_202008280286	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0314	ug/L	126	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0321	ug/L	128	(70-130)	30	2.2

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00259	ug/L	129	(50-150)		
MS_202008280287	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00253	ug/L	110	(50-150)		
DUP_202008280286	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0315	ug/L	126	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0323	ug/L	129	(70-130)	30	2.5
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00229	ug/L	114	(50-150)		
MS_202008280287	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00220	ug/L	110	(50-150)		
DUP_202008280286	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0299	ug/L	120	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0309	ug/L	123	(70-130)	30	3.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202008280287	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00220	ug/L	110	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1271848 Analytical Batch: 1272407

Analysis Date: 09/01/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0443	ug/L	94	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0488	ug/L	104	(70-130)	30	9.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS2_202008270876	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0477	ug/L	101	(70-130)		
MSD2_202008270876	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0498	ug/L	106	(70-130)	30	4.3
LCS3	13C2-PFDA (S)		100	119	%	119	(70-130)		
LCS4	13C2-PFDA (S)		100	120	%	120	(70-130)		
MBLK	13C2-PFDA (S)			117	%	117	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	121	%	121	(70-130)		
MS2_202008270876	13C2-PFDA (S)		100	115	%	115	(70-130)		
MSD2_202008270876	13C2-PFDA (S)		100	118	%	118	(70-130)		
LCS3	13C2-PFHxA (S)		100	125	%	125	(70-130)		
LCS4	13C2-PFHxA (S)		100	124	%	124	(70-130)		
MBLK	13C2-PFHxA (S)			114	%	114	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	118	%	118	(70-130)		
MS2_202008270876	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MSD2_202008270876	13C2-PFHxA (S)		100	116	%	116	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	98.6	%	99	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.3	%	99	(50-150)		
MS2_202008270876	13C2-PFOA- IS#1 (I)		100	99.2	%	99	(50-150)		
MSD2_202008270876	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	114	%	114	(70-130)		
MBLK	13C3-HFPO-DA (S)			106	%	106	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
MS2_202008270876	13C3-HFPO-DA (S)		100	104	%	105	(70-130)		
MSD2_202008270876	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.5	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.7	%	98	(50-150)		
MS2_202008270876	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MSD2_202008270876	13C4-PFOS- IS#2 (I)		100	99.7	%	100	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0454	ug/L	94	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0491	ug/L	101	(70-130)	30	7.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00198	ug/L	105	(50-150)		
MS2_202008270876	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0473	ug/L	98	(70-130)		
MSD2_202008270876	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0474	ug/L	98	(70-130)	30	0.15
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0452	ug/L	97	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0482	ug/L	103	(70-130)	30	6.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00197	ug/L	106	(50-150)		
MS2_202008270876	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0472	ug/L	101	(70-130)		
MSD2_202008270876	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0492	ug/L	106	(70-130)	30	4.4
LCS3	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.5	%	100	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.4	%	99	(50-150)		
MS2_202008270876	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MSD2_202008270876	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	114	%	115	(70-130)		
MBLK	d5-NEtFOSAA (S)			112	%	112	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 889747
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202008270876	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MSD2_202008270876	d5-NEtFOSAA (S)		100	116	%	116	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0490	ug/L	98	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0526	ug/L	105	(70-130)	30	6.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00201	ug/L	101	(50-150)		
MS2_202008270876	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0478	ug/L	96	(70-130)		
MSD2_202008270876	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0491	ug/L	98	(70-130)	30	2.6
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0475	ug/L	95	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0524	ug/L	105	(70-130)	30	9.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	105	(50-150)		
MS2_202008270876	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0503	ug/L	101	(70-130)		
MSD2_202008270876	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0516	ug/L	103	(70-130)	30	2.6
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0493	ug/L	99	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0521	ug/L	104	(70-130)	30	5.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202008270876	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0509	ug/L	102	(70-130)		
MSD2_202008270876	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0520	ug/L	104	(70-130)	30	2.1
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0430	ug/L	97	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0458	ug/L	104	(70-130)	30	6.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00173	ug/L	98	(50-150)		
MS2_202008270876	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0390	ug/L	88	(70-130)		
MSD2_202008270876	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0428	ug/L	97	(70-130)	30	9.3
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0486	ug/L	97	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0536	ug/L	107	(70-130)	30	9.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00226	ug/L	113	(50-150)		
MS2_202008270876	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0541	ug/L	108	(70-130)		
MSD2_202008270876	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0533	ug/L	107	(70-130)	30	1.5
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0497	ug/L	99	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0537	ug/L	107	(70-130)	30	7.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00217	ug/L	109	(50-150)		
MS2_202008270876	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0552	ug/L	110	(70-130)		
MSD2_202008270876	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0521	ug/L	104	(70-130)	30	5.7

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0481	ug/L	96	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0514	ug/L	103	(70-130)	30	6.6
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00228	ug/L	114	(50-150)		
MS2_202008270876	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0506	ug/L	101	(70-130)		
MSD2_202008270876	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0492	ug/L	98	(70-130)	30	2.9
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0443	ug/L	97	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0474	ug/L	104	(70-130)	30	6.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00198	ug/L	108	(50-150)		
MS2_202008270876	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0471	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0477	ug/L	105	(70-130)	30	1.3
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0525	ug/L	105	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0546	ug/L	109	(70-130)	30	3.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00226	ug/L	113	(50-150)		
MS2_202008270876	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0495	ug/L	99	(70-130)		
MSD2_202008270876	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0495	ug/L	99	(70-130)	30	0.080
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0548	ug/L	110	(70-130)	30	7.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	115	(50-150)		
MS2_202008270876	Perfluorononanoic acid (PFNA)	ND	0.05	0.0531	ug/L	106	(70-130)		
MSD2_202008270876	Perfluorononanoic acid (PFNA)	ND	0.05	0.0524	ug/L	105	(70-130)	30	1.3
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0445	ug/L	96	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0486	ug/L	105	(70-130)	30	8.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00203	ug/L	110	(50-150)		
MS2_202008270876	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0476	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0490	ug/L	106	(70-130)	30	2.9
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0527	ug/L	105	(70-130)	30	6.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00229	ug/L	115	(50-150)		
MS2_202008270876	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0518	ug/L	103	(70-130)		
MSD2_202008270876	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0519	ug/L	103	(70-130)	30	0.26
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0478	ug/L	96	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0506	ug/L	101	(70-130)	30	5.7

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00251	ug/L	125	(50-150)		
MS2_202008270876	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0521	ug/L	104	(70-130)		
MSD2_202008270876	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0517	ug/L	103	(70-130)	30	0.72
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0515	ug/L	103	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0542	ug/L	108	(70-130)	30	5.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00225	ug/L	112	(50-150)		
MS2_202008270876	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0551	ug/L	110	(70-130)		
MSD2_202008270876	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0544	ug/L	109	(70-130)	30	1.3
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0496	ug/L	99	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0530	ug/L	106	(70-130)	30	6.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00208	ug/L	104	(50-150)		
MS2_202008270876	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0529	ug/L	106	(70-130)		
MSD2_202008270876	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0530	ug/L	106	(70-130)	30	0.24

Total Organic Carbon by SM 5310C

Analytical Batch: 1272641

Analysis Date: 09/04/2020

LCS1	Total Organic Carbon		5	5.36	mg/L	107	(90-110)		
LCS2	Total Organic Carbon		5	5.39	mg/L	108	(90-110)	20	0.56
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.238	mg/L	119	(50-150)		
MS_202008280198	Total Organic Carbon	1.5	4	6.82	mg/L	<u>132</u>	(80-120)		
MS2_202008280200	Total Organic Carbon	0.72	2	3.32	mg/L	<u>130</u>	(80-120)		
MSD_202008280198	Total Organic Carbon	1.5	4	6.62	mg/L	<u>127</u>	(80-120)	20	3.0
MSD2_202008280200	Total Organic Carbon	0.72	2	3.34	mg/L	<u>131</u>	(80-120)	20	0.60

EPA Method 537.1 by EPA 537.1

Prep Batch: 1272516 Analytical Batch: 1273300

Analysis Date: 09/04/2020

DUP_202009020385	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0509	ug/L	108	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0482	ug/L	102	(70-130)	30	5.5
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00205	ug/L	109	(50-150)		
MS1_202009010542	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0254	ug/L	108	(70-130)		
DUP_202009020385	13C2-PFDA (S)			106	%	106	(70-130)		
LCS3	13C2-PFDA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFDA (S)		100	101	%	101	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFDA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.3	%	98	(70-130)		
MS1_202009010542	13C2-PFDA (S)		100	107	%	107	(70-130)		
DUP_202009020385	13C2-PFHxA (S)			108	%	108	(70-130)		
LCS3	13C2-PFHxA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MS1_202009010542	13C2-PFHxA (S)		100	107	%	107	(70-130)		
DUP_202009020385	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	96.3	%	96	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			97.7	%	98	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MS1_202009010542	13C2-PFOA- IS#1 (I)		100	97.2	%	97	(50-150)		
DUP_202009020385	13C3-HFPO-DA (S)			107	%	107	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	109	%	109	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MBLK	13C3-HFPO-DA (S)			104	%	104	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MS1_202009010542	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
DUP_202009020385	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.5	%	100	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			97.5	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MS1_202009010542	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
DUP_202009020385	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0515	ug/L	106	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0498	ug/L	103	(70-130)	30	3.4
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00222	ug/L	117	(50-150)		
MS1_202009010542	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0270	ug/L	114	(70-130)		
DUP_202009020385	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0503	ug/L	108	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0484	ug/L	104	(70-130)	30	3.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00213	ug/L	115	(50-150)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202009010542	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0256	ug/L	110	(70-130)		
DUP_202009020385	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	99.9	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.0	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS1_202009010542	d3-NMeFOSAA (I)		100	97.4	%	97	(50-150)		
DUP_202009020385	d5-NEtFOSAA (S)			105	%	105	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	96.3	%	96	(70-130)		
MBLK	d5-NEtFOSAA (S)			104	%	104	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	98.9	%	99	(70-130)		
MS1_202009010542	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
DUP_202009020385	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0552	ug/L	110	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0530	ug/L	106	(70-130)	30	4.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00228	ug/L	114	(50-150)		
MS1_202009010542	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0279	ug/L	112	(70-130)		
DUP_202009020385	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0532	ug/L	106	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0508	ug/L	102	(70-130)	30	4.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00234	ug/L	117	(50-150)		
MS1_202009010542	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0280	ug/L	112	(70-130)		
DUP_202009020385	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0528	ug/L	106	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0518	ug/L	104	(70-130)	30	1.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00250	ug/L	125	(50-150)		
MS1_202009010542	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0281	ug/L	112	(70-130)		
DUP_202009020385	Perfluorobutanesulfonic acid (PFBS)	0.0020		0.00201	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0491	ug/L	111	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0482	ug/L	109	(70-130)	30	1.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00210	ug/L	118	(50-150)		
MS1_202009010542	Perfluorobutanesulfonic acid (PFBS)	0.0049	0.022	0.0294	ug/L	111	(70-130)		
DUP_202009020385	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0539	ug/L	108	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0526	ug/L	105	(70-130)	30	2.4
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00228	ug/L	114	(50-150)		
MS1_202009010542	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0296	ug/L	113	(70-130)		
DUP_202009020385	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0533	ug/L	107	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0519	ug/L	104	(70-130)	30	2.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202009010542	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0270	ug/L	108	(70-130)		
DUP_202009020385	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0520	ug/L	104	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0522	ug/L	104	(70-130)	30	0.38
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00240	ug/L	120	(50-150)		
MS1_202009010542	Perfluoroheptanoic acid (PFHpA)	0.0031	0.025	0.0317	ug/L	115	(70-130)		
DUP_202009020385	Perfluorohexanesulfonic acid (PFHxS)	0.0021		0.00222	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0493	ug/L	108	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0492	ug/L	108	(70-130)	30	0.20
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00221	ug/L	121	(50-150)		
MS1_202009010542	Perfluorohexanesulfonic acid (PFHxS)	0.011	0.023	0.0358	ug/L	108	(70-130)		
DUP_202009020385	Perfluorohexanoic acid (PFHxA)	0.0031		0.00301	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0554	ug/L	111	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0551	ug/L	110	(70-130)	30	0.54
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS1_202009010542	Perfluorohexanoic acid (PFHxA)	0.0050	0.025	0.0324	ug/L	110	(70-130)		
DUP_202009020385	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0551	ug/L	110	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0526	ug/L	105	(70-130)	30	4.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00239	ug/L	120	(50-150)		
MS1_202009010542	Perfluorononanoic acid (PFNA)	0.0028	0.025	0.0314	ug/L	114	(70-130)		
DUP_202009020385	Perfluorooctanesulfonic acid (PFOS)	0.0034		0.00337	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0509	ug/L	110	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0486	ug/L	105	(70-130)	30	4.6

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 889747
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00220	ug/L	119	(50-150)		
MS1_202009010542	Perfluorooctanesulfonic acid (PFOS)	0.025	0.023	0.0486	ug/L	102	(70-130)		
DUP_202009020385	Perfluorooctanoic acid (PFOA)	0.0031		0.00302	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0544	ug/L	109	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0526	ug/L	105	(70-130)	30	3.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00250	ug/L	125	(50-150)		
MS1_202009010542	Perfluorooctanoic acid (PFOA)	0.011	0.025	0.0389	ug/L	113	(70-130)		
DUP_202009020385	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0534	ug/L	107	(70-130)	30	4.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00184	ug/L	92	(50-150)		
MS1_202009010542	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0273	ug/L	108	(70-130)		
DUP_202009020385	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0566	ug/L	113	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0551	ug/L	110	(70-130)	30	2.7
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00227	ug/L	113	(50-150)		
MS1_202009010542	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0288	ug/L	115	(70-130)		
DUP_202009020385	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0541	ug/L	108	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0519	ug/L	104	(70-130)	30	4.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202009010542	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0276	ug/L	110	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 09/09/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 09/09/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 09/09/2020

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 09/09/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 890914
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli	(MTF/EC+MUG)	x		x
E. Coli	CFR 141.21(f)(6)(i)	x		x
E. Coli	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 890914
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **September 03, 2020 at 1339**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202009030436	GAC-1-20200903 Static ID: 537.1 @537.1	09/03/2020 0805
202009030437	GAC-2-20200903 Static ID: 537.1 @537.1	09/03/2020 0808
202009030438	GAC-3-20200903 Static ID: 537.1 @537.1	09/03/2020 0811
202009030439	GAC-4-20200903 Static ID: 537.1 @537.1	09/03/2020 0814
202009030440	IX-1-20200903 Static ID: 537.1 @537.1	09/03/2020 0817
202009030441	IX-2-20200903 Static ID: 537.1 @537.1	09/03/2020 0820
202009030442	IX-3-20200903 Static ID: 537.1 @537.1	09/03/2020 0825
202009030443	IX-4-20200903 Static ID: 537.1 @537.1	09/03/2020 0828
202009030444	LH-INF-20200903 @537.1 Chloride Total Organic Carbon	09/03/2020 0830
	@ANIONS48 Oil and Grease by 1664 HEM SGT	Alkalinity in CaCO3 units Sulfate
202009030445	GAC-5-20200903 @537.1	09/03/2020 1130
202009030446	GAC-6-20200903	09/03/2020 1133

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 890914
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **September 03, 2020 at 1339**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202009030447	GAC-7-20200903	09/03/2020 1136
	@537.1	
202009030448	GAC-8-20200903	09/03/2020 1139
	@537.1	
202009030449	IX-5-20200903	09/03/2020 1142
	@537.1	
202009030450	IX-6-20200903	09/03/2020 1145
	@537.1	
202009030451	IX-7-20200903	09/03/2020 1148
	@537.1	
202009030452	IX-8-20200903	09/03/2020 1151
	@537.1	
202009030453	MB-INF-20200903	09/03/2020 1155
	@537.1	
	Chloride	@ANIONS48
	Total Organic Carbon	Oil and Grease by 1664 HEM SGT
		Alkalinity in CaCO3 units
		Sulfate
202009030454	MB-INF-20200903 MS	09/03/2020 1155
	Oil and Grease by 1664 HEM SGT	
202009030455	MB-INF-20200903 MSD	09/03/2020 1155
	Oil and Grease by 1664 HEM SGT	
202009030456	LH-INF-20200903 MS	09/03/2020 0830
	Oil and Grease by 1664 HEM SGT	
202009030457	LH-INF-20200903 MSD	09/03/2020 0830
	Oil and Grease by 1664 HEM SGT	

Test Description

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 890914
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **September 03, 2020 at 1339**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1 -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	

810914

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) BC									
REQUESTED ANALYSES Please check box or fill in blank as needed.													
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	EPA 1664A ITEM
		DATE	TIME						PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	
	GAC-1-20200903	9/3/20	0805	Water	2		X		X				
	GAC-2-20200903		0808	Water	1		X		X				
	GAC-3-20200903		0811	Water	1		X		X				
	GAC-4-20200903		0814	Water	1		X		X				
	IX-1-20200903		0817	Water	1		X		X				
	IX-2-20200903		0820	Water	1		X		X				
	IX-3-20200903		0825	Water	1		X		X				
	IX-4-20200903		0828	Water	1		X		X				
	LH-INF-20200903		0830	Water	6		X		X				
	LH-INF-DUP-BC			Water									
	GAC-5-20200903	9/3/20	1130	Water	2		X		X				
	GAC-6-20200903		1133	Water	1		X		X				
	GAC-7-20200903		1136	Water	1		X		X				
	GAC-8-20200903		1139	Water	1		X		X				
Relinquished by: (Signature) <i>[Signature]</i> Received by: (Signature) <i>[Signature]</i> Date: 9/3/20 Time: 1320													
Relinquished by: (Signature) <i>[Signature]</i> Received by: (Signature) <i>[Signature]</i> Date: 9-3-20 Time: 1344													
Relinquished by: (Signature) <i>[Signature]</i> Received by: (Signature) <i>[Signature]</i> Date: Date: Time:													

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302									
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		LAB CONTACT: Sophia Liang									
LABORATORY: Eurofins Eaton Analytical		GLOBAL ID:		SAMPLER(S): (PRINT) <u>BC</u>									
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.											
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdorres@gsi-net.com; Provide EDD of sample results													
LAB USE ONLY	SAMPLE ID	SAMPLING		NO. OF CONT.	MATRIX	Field Filtered	Unpreserved	Preserved	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	EPA 1661H HEM
		DATE	TIME										
	IX-5-20200903	9/3/20	1142	2	Water			X					
	IX-6-20200903	↓	1145	↓	Water			X					
	IX-7-20200903	↓	1148	↓	Water			X					
	IX-8-20200903	↓	1151	↓	Water			X					
	MB-INF-20200903	↓	1155	6	Water			X	X	X			
	MB-INF-DUP-BC				Water								
	FB-BC				Water								
	MB-INF-20200903 MS	9/3/20	1155	1	Water			1					
	MB-INF-20200903 MSB	↓	1155	1	Water			1					
	LH-INF-20200903 MS	↓	0830	1	Water			1					
	LH-INF-20200903 MS D	↓	0830	1	Water			1					
Relinquished by: (Signature)		Date: <u>9/3/20</u>		Time: <u>13:39</u>		Received by: (Signature) <u>[Signature]</u>		Date: <u>9/3/20</u>		Time: <u>13:39</u>			
Relinquished by: (Signature)		Date: <u>9/3/20</u>		Time: <u>13:39</u>		Received by: (Signature)		Date: <u>9/3/20</u>		Time: <u>13:39</u>			
Relinquished by: (Signature)		Date: <u>9/3/20</u>		Time: <u>13:39</u>		Received by: (Signature)		Date: <u>9/3/20</u>		Time: <u>13:39</u>			

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 84914

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 049A (Observation = 13.8 °C) (Corr. Factor = 0.2 °C) (Final = 13.6 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partly Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: Walk-In

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr. Factor= _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA Headspace: No Samples with Headspace: Samples with Headspace (see below):
 Headspace Documentation (use additional VOC Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(0251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors):

RECEIVED BY:	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
	<u>Yonei</u>	<u>Yonei</u>	Eurofins Eaton Analytical	<u>9-3-20</u>	<u>1339</u>

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 890914
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease with Silica Gel Treatment are submitted by Eurofins
Calscience in Garden Grove, CAELAP 2944 exp 9-30-2020

Flags Legend:

M2 - Matrix spike recovery was low; the associated blank spike recovery was acceptable.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202009030440	<u>IX-1-20200903</u>				
09/09/2020 12:16	Perfluorohexanoic acid (PFHxA)		0.0021		ug/L	0.0020
	202009030441	<u>IX-2-20200903</u>				
09/09/2020 12:35	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
	202009030442	<u>IX-3-20200903</u>				
09/09/2020 14:01	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
	202009030443	<u>IX-4-20200903</u>				
09/09/2020 14:20	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
	202009030444	<u>LH-INF-20200903</u>				
09/09/2020 19:02	Alkalinity in CaCO3 units		200		mg/L	2.0
09/03/2020 20:13	Chloride		110	250	mg/L	2.5
09/03/2020 20:13	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
09/03/2020 20:13	Nitrate as NO3 (calc)		13	45	mg/L	2.2
09/09/2020 14:30	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
09/09/2020 14:30	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
09/09/2020 14:30	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
09/09/2020 14:30	Perfluorononanoic acid (PFNA)		0.0032		ug/L	0.0020
09/09/2020 14:30	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
09/09/2020 14:30	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
09/03/2020 20:13	Sulfate		180	250	mg/L	2.5
09/03/2020 20:13	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
09/10/2020 04:34	Total Organic Carbon		0.76		mg/L	0.20
	202009030445	<u>GAC-5-20200903</u>				
09/09/2020 14:39	Perfluorobutanesulfonic acid (PFBS)		0.0060		ug/L	0.0020
09/09/2020 14:39	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
09/09/2020 14:39	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
09/09/2020 14:39	Perfluorooctanesulfonic acid (PFOS)		0.0060		ug/L	0.0020
09/09/2020 14:39	Perfluorooctanoic acid (PFOA)		0.0062		ug/L	0.0020
	202009030447	<u>GAC-7-20200903</u>				
09/09/2020 14:59	Perfluorobutanesulfonic acid (PFBS)		0.0046		ug/L	0.0020
09/09/2020 14:59	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
	202009030449	<u>IX-5-20200903</u>				
09/09/2020 15:18	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
	202009030450	<u>IX-6-20200903</u>				

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
09/10/2020 16:01	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
	202009030451	<u>IX-7-20200903</u>				
09/10/2020 18:06	Perfluorohexanoic acid (PFHxA)		0.0050		ug/L	0.0020
	202009030452	<u>IX-8-20200903</u>				
09/10/2020 16:20	Perfluorohexanoic acid (PFHxA)		0.0052		ug/L	0.0020
	202009030453	<u>MB-INF-20200903</u>				
09/09/2020 18:54	Alkalinity in CaCO3 units		170		mg/L	2.0
09/03/2020 23:14	Chloride		48	250	mg/L	2.5
09/03/2020 23:14	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
09/03/2020 23:14	Nitrate as NO3 (calc)		11	45	mg/L	2.2
09/11/2020 07:07	Oil and Grease with SGT		1.56		mg/L	1.2
09/10/2020 18:15	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
09/10/2020 18:15	Perfluoroheptanoic acid (PFHpA)		0.0038		ug/L	0.0020
09/10/2020 18:15	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
09/10/2020 18:15	Perfluorohexanoic acid (PFHxA)		0.0053		ug/L	0.0020
09/10/2020 18:15	Perfluorononanoic acid (PFNA)		0.0038		ug/L	0.0020
09/10/2020 18:15	Perfluorooctanesulfonic acid (PFOS)		0.035		ug/L	0.0020
09/10/2020 18:15	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
09/03/2020 23:14	Sulfate		75	250	mg/L	2.5
09/03/2020 23:14	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
09/10/2020 04:51	Total Organic Carbon		1.1		mg/L	0.20

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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200903 (202009030436)					Sampled on 09/03/2020 0805				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	13C2-PFDA	90	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	13C2-PFHxA	101	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	13C3-HFPO-DA	90	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	d3-NMeFOSAA	102	%		1
09/09/20	09/10/20 17:46	1273351	1273976	(EPA 537.1)	d5-NEtFOSAA	101	%		1

GAC-2-20200903 (202009030437)					Sampled on 09/03/2020 0808				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	13C2-PFDA	76	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	13C2-PFHxA	87	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	139	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	79	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	115	%		1
09/08/20	09/09/20 16:15	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	102	%		1

GAC-3-20200903 (202009030438)

Sampled on 09/03/2020 0811

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	13C2-PFDA	87	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	13C2-PFHxA	98	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	87	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	113	%		1
09/08/20	09/09/20 13:42	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	103	%		1

GAC-4-20200903 (202009030439)

Sampled on 09/03/2020 0814

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

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Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	13C2-PFDA	85	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	13C2-PFHxA	94	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	125	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	88	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/08/20	09/09/20 13:52	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	102	%		1

IX-1-20200903 (202009030440)

Sampled on 09/03/2020 0817

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND (M2)	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0021	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	13C2-PFDA	96	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	13C2-PFHxA	100	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	94	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/08/20	09/09/20 12:16	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	108	%		1

IX-2-20200903 (202009030441)

Sampled on 09/03/2020 0820

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	13C2-PFDA	92	%		1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	95	%		1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	114	%		1

Rounding on totals after summation.

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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 12:35	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	108	%		1
IX-3-20200903 (202009030442)						Sampled on 09/03/2020 0825			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	13C2-PFDA	92	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	92	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	118	%		1
09/08/20	09/09/20 14:01	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	101	%		1

IX-4-20200903 (202009030443)						Sampled on 09/03/2020 0828			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	13C2-PFDA	91	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	91	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	120	%		1
09/08/20	09/09/20 14:20	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	105	%		1

LH-INF-20200903 (202009030444)

Sampled on 09/03/2020 0830

SM 5310C - Total Organic Carbon

09/10/20 04:34	1273528	(SM 5310C)	Total Organic Carbon	0.76	mg/L	0.20	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

09/03/20 20:13	1272797	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
09/03/20 20:13	1272797	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
09/03/20 20:13	1272797	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
09/03/20 20:13	1272797	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

09/03/20 20:13	1272798	(EPA 300.0)	Chloride	110	mg/L	2.5	5
09/03/20 20:13	1272798	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0032	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	13C2-PFDA	96	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	94	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	120	%		1
09/08/20	09/09/20 14:30	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	102	%		1

EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT

09/11/20 07:07	(EPA 1664 HEM-SGT)	Oil and Grease with SGT	ND	mg/L	1.2	1
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SM 2320B - Alkalinity in CaCO3 units

09/09/20 19:02	1273531 (SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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GAC-5-20200903 (202009030445)

Sampled on 09/03/2020 1130

EPA 537.1 - EPA Method 537.1

09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
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Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0060	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0062	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	13C2-PFDA	88	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	13C2-PFHxA	101	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	91	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	119	%		1
09/08/20	09/09/20 14:39	1272816	1273582	(EPA 537.1)	d5-NetFOSAA	94	%		1

GAC-6-20200903 (202009030446)

Sampled on 09/03/2020 1133

EPA 537.1 - EPA Method 537.1

09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	13C2-PFDA	83	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	13C2-PFHxA	96	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	86	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	118	%		1
09/08/20	09/09/20 14:49	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	101	%		1

GAC-7-20200903 (202009030447)

Sampled on 09/03/2020 1136

EPA 537.1 - EPA Method 537.1

09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0046	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	13C2-PFDA	87	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	13C2-PFHxA	100	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	90	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	117	%		1
09/08/20	09/09/20 14:59	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	100	%		1

GAC-8-20200903 (202009030448)

Sampled on 09/03/2020 1139

EPA 537.1 - EPA Method 537.1

09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	13C2-PFDA	89	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	91	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/08/20	09/09/20 15:08	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	100	%		1

IX-5-20200903 (202009030449)

Sampled on 09/03/2020 1142

EPA 537.1 - EPA Method 537.1

09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	13C2-PFDA	94	%		1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	13C2-PFHxA	99	%		1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	13C3-HFPO-DA	91	%		1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	d3-NMeFOSAA	117	%		1
09/08/20	09/09/20 15:18	1272816	1273582	(EPA 537.1)	d5-NEtFOSAA	103	%		1

IX-6-20200903 (202009030450)

Sampled on 09/03/2020 1145

EPA 537.1 - EPA Method 537.1

09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	13C2-PFDA	77	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	13C2-PFHxA	80	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	13C2-PFOA- IS#1	139	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	13C3-HFPO-DA	75	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	d3-NMeFOSAA	107	%		1
09/09/20	09/10/20 16:01	1273351	1273976	(EPA 537.1)	d5-NEtFOSAA	93	%		1

IX-7-20200903 (202009030451)

Sampled on 09/03/2020 1148

EPA 537.1 - EPA Method 537.1

09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
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Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0050	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	13C2-PFDA	82	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	13C2-PFHxA	87	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	13C2-PFOA- IS#1	126	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	13C3-HFPO-DA	82	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	d3-NMeFOSAA	105	%		1
09/09/20	09/10/20 18:06	1273351	1273976	(EPA 537.1)	d5-NetFOSAA	93	%		1

IX-8-20200903 (202009030452)

Sampled on 09/03/2020 1151

EPA 537.1 - EPA Method 537.1

09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0052	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	13C2-PFDA	93	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	13C2-PFHxA	98	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	13C3-HFPO-DA	92	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	13C4-PFOS- IS#2	114	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	d3-NMeFOSAA	107	%		1
09/09/20	09/10/20 16:20	1273351	1273976	(EPA 537.1)	d5-NEtFOSAA	95	%		1

MB-INF-20200903 (202009030453)

Sampled on 09/03/2020 1155

SM 5310C - Total Organic Carbon

09/10/20 04:51	1273528	(SM 5310C)	Total Organic Carbon	1.1	mg/L	0.20	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

09/03/20 23:14	1272797	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5
09/03/20 23:14	1272797	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
09/03/20 23:14	1272797	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
09/03/20 23:14	1272797	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

09/03/20 23:14	1272798	(EPA 300.0)	Chloride	48	mg/L	2.5	5
09/03/20 23:14	1272798	(EPA 300.0)	Sulfate	75	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0053	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0038	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.035	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	13C2-PFDA	89	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	13C2-PFHxA	91	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	13C3-HFPO-DA	83	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	13C4-PFOS- IS#2	117	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	d3-NMeFOSAA	105	%		1
09/09/20	09/10/20 18:15	1273351	1273976	(EPA 537.1)	d5-NEtFOSAA	89	%		1
EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT									
	09/11/20 07:07			(EPA 1664 HEM-SGT)	Oil and Grease with SGT	1.56	mg/L	1.2	1
SM 2320B - Alkalinity in CaCO3 units									
	09/09/20 18:54		1273531	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1
<u>MB-INF-20200903 MS (202009030454)</u>						Sampled on 09/03/2020 1155			
EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT									
	09/11/20 07:07			(EPA 1664 HEM-SGT)	Oil and Grease with SGT	94	%	1.2	1
<u>MB-INF-20200903 MSD (202009030455)</u>						Sampled on 09/03/2020 1155			
EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT									
	09/11/20 07:07			(EPA 1664 HEM-SGT)	Oil and Grease with SGT	95	%	1.2	1
<u>LH-INF-20200903 MS (202009030456)</u>						Sampled on 09/03/2020 0830			

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Laboratory Data

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/03/2020 1339

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT									
	09/11/20 07:07			(EPA 1664 HEM-SGT)	Oil and Grease with SGT	95	%	1.2	1
<u>LH-INF-20200903 MSD (202009030457)</u>						Sampled on 09/03/2020 0830			
EPA 1664 HEM-SGT - Oil and Grease by 1664 HEM SGT									
	09/11/20 07:07			(EPA 1664 HEM-SGT)	Oil and Grease with SGT	94	%	1.2	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1272797

202009030444 LH-INF-20200903
 202009030453 MB-INF-20200903

Analysis Date: 09/03/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1272798

202009030444 LH-INF-20200903
 202009030453 MB-INF-20200903

Analysis Date: 09/03/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Total Organic Carbon

Analytical Batch: 1273528

202009030444 LH-INF-20200903
 202009030453 MB-INF-20200903

Analysis Date: 09/10/2020

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

Alkalinity in CaCO3 units

Analytical Batch: 1273531

202009030444 LH-INF-20200903
 202009030453 MB-INF-20200903

Analysis Date: 09/09/2020

Analyzed by: ZS6I
 Analyzed by: ZS6I

EPA Method 537.1

Prep Batch: 1272816 Analytical Batch: 1273582

202009030437 GAC-2-20200903
 202009030438 GAC-3-20200903
 202009030439 GAC-4-20200903
 202009030440 IX-1-20200903
 202009030441 IX-2-20200903
 202009030442 IX-3-20200903
 202009030443 IX-4-20200903
 202009030444 LH-INF-20200903
 202009030445 GAC-5-20200903
 202009030446 GAC-6-20200903
 202009030447 GAC-7-20200903
 202009030448 GAC-8-20200903
 202009030449 IX-5-20200903

Analysis Date: 09/09/2020

Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
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 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM

EPA Method 537.1

Prep Batch: 1273351 Analytical Batch: 1273976

202009030436 GAC-1-20200903
 202009030450 IX-6-20200903
 202009030451 IX-7-20200903
 202009030452 IX-8-20200903
 202009030453 MB-INF-20200903

Analysis Date: 09/10/2020

Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM
 Analyzed by: Y7BM

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Report: 890914
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1272797					Analysis Date: 09/03/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.64	mg/L	106	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.65	mg/L	106	(90-110)	20	0.38
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0488	mg/L	98	(50-150)		
MS_202009030444	Nitrate as Nitrogen by IC	2.8	6.5	9.46	mg/L	106	(80-120)		
MS_202009030453	Nitrate as Nitrogen by IC	2.6	6.5	9.21	mg/L	106	(80-120)		
MSD_202009030444	Nitrate as Nitrogen by IC	2.8	6.5	9.65	mg/L	109	(80-120)	20	1.9
MSD_202009030453	Nitrate as Nitrogen by IC	2.6	6.5	9.20	mg/L	106	(80-120)	20	0.097
LCS1	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0453	mg/L	91	(50-150)		
MS_202009030444	Nitrite Nitrogen by IC	ND	2.5	2.50	mg/L	100	(80-120)		
MS_202009030453	Nitrite Nitrogen by IC	ND	2.5	2.59	mg/L	104	(80-120)		
MSD_202009030444	Nitrite Nitrogen by IC	ND	2.5	2.59	mg/L	103	(80-120)	20	3.5
MSD_202009030453	Nitrite Nitrogen by IC	ND	2.5	2.59	mg/L	104	(80-120)	20	0.073
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1272798					Analysis Date: 09/03/2020				
LCS1	Chloride		25	27.3	mg/L	109	(90-110)		
LCS2	Chloride		25	27.4	mg/L	110	(90-110)	20	0.37
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.457	mg/L	91	(50-150)		
MS_202009030444	Chloride	110	65	178	mg/L	109	(80-120)		
MS_202009030453	Chloride	48	65	120	mg/L	115	(80-120)		
MSD_202009030444	Chloride	110	65	179	mg/L	112	(80-120)	20	0.76
MSD_202009030453	Chloride	48	65	120	mg/L	115	(80-120)	20	0.16
LCS1	Sulfate		50	53.6	mg/L	107	(90-110)		
LCS2	Sulfate		50	53.8	mg/L	108	(90-110)	20	0.37
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.996	mg/L	100	(50-150)		
MRLW	Sulfate		0.25	0.242	mg/L	97	(50-150)		
MS_202009030444	Sulfate	180	125	314	mg/L	108	(80-120)		
MS_202009030453	Sulfate	75	125	212	mg/L	110	(80-120)		
MSD_202009030444	Sulfate	180	125	318	mg/L	111	(80-120)	20	1.2

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202009030453	Sulfate	75	125	212	mg/L	110	(80-120)	20	0.20

Total Organic Carbon by SM 5310C

Analytical Batch: 1273528

Analysis Date: 09/10/2020

LCS1	Total Organic Carbon		5	5.10	mg/L	102	(90-110)		
LCS2	Total Organic Carbon		5	5.04	mg/L	101	(90-110)	20	1.2
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.269	mg/L	135	(50-150)		
MS_202009040105	Total Organic Carbon	4.8	4	ND	mg/L				
MSD_202009040105	Total Organic Carbon	4.8	4	ND	mg/L				

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1273531

Analysis Date: 09/09/2020

LCS1	Alkalinity in CaCO3 units		100	99.6	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.4	mg/L	99	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.65	mg/L	83	(50-150)		
MS_202009030272	Alkalinity in CaCO3 units	46	100	148	mg/L	101	(80-120)		
MS_202009040173	Alkalinity in CaCO3 units	22	100	122	mg/L	100	(80-120)		
MSD_202009030272	Alkalinity in CaCO3 units	46	100	148	mg/L	102	(80-120)	20	0.027
MSD_202009040173	Alkalinity in CaCO3 units	22	100	124	mg/L	101	(80-120)	20	1.2

EPA Method 537.1 by EPA 537.1

Prep Batch: 1272816 Analytical Batch: 1273582

Analysis Date: 09/09/2020

DUP_202009030441	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0218	ug/L	93	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0222	ug/L	94	(70-130)	30	1.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00171	ug/L	91	(50-150)		
MS_202009030440	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00175	ug/L	56	(50-150)		
DUP_202009030441	13C2-PFDA (S)			91.0	%	91	(70-130)		
LCS1	13C2-PFDA (S)		100	90.1	%	90	(70-130)		
LCS2	13C2-PFDA (S)		100	88.7	%	89	(70-130)		
MBLK	13C2-PFDA (S)			92.2	%	92	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	90.0	%	90	(70-130)		
MS_202009030440	13C2-PFDA (S)		100	94.7	%	95	(70-130)		
DUP_202009030441	13C2-PFHxA (S)			99.1	%	99	(70-130)		
LCS1	13C2-PFHxA (S)		100	99.4	%	99	(70-130)		
LCS2	13C2-PFHxA (S)		100	93.3	%	93	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFHxA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	103	%	103	(70-130)		
MS_202009030440	13C2-PFHxA (S)		100	100	%	100	(70-130)		
DUP_202009030441	13C2-PFOA- IS#1 (I)			118	%	118	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			113	%	113	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
MS_202009030440	13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
DUP_202009030441	13C3-HFPO-DA (S)			93.6	%	94	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	93.5	%	93	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	81.2	%	81	(70-130)		
MBLK	13C3-HFPO-DA (S)			95.9	%	96	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.8	%	95	(70-130)		
MS_202009030440	13C3-HFPO-DA (S)		100	93.6	%	94	(70-130)		
DUP_202009030441	13C4-PFOS- IS#2 (I)			107	%	107	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	105	(50-150)		
MS_202009030440	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202009030441	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0234	ug/L	99	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0232	ug/L	98	(70-130)	30	1.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00211	ug/L	112	(50-150)		
MS_202009030440	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00213	ug/L	112	(50-150)		
DUP_202009030441	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0217	ug/L	93	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0221	ug/L	95	(70-130)	30	1.8
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00181	ug/L	97	(50-150)		
MS_202009030440	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00188	ug/L	84	(50-150)		
DUP_202009030441	d3-NMeFOSAA (I)			118	%	118	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
MBLK	d3-NMeFOSAA (I)			113	%	113	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	112	%	112	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202009030440	d3-NMeFOSAA (I)		100	115	%	115	(50-150)		
DUP_202009030441	d5-NEtFOSAA (S)			108	%	108	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	99.7	%	100	(70-130)		
MBLK	d5-NEtFOSAA (S)			105	%	105	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MS_202009030440	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
DUP_202009030441	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0236	ug/L	95	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0212	ug/L	85	(70-130)	30	11
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00206	ug/L	103	(50-150)		
MS_202009030440	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00218	ug/L	109	(50-150)		
DUP_202009030441	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	105	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0262	ug/L	105	(70-130)	30	0.76
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00226	ug/L	113	(50-150)		
MS_202009030440	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00243	ug/L	50	(50-150)		
DUP_202009030441	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0265	ug/L	106	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)	30	1.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00230	ug/L	115	(50-150)		
MS_202009030440	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00233	ug/L	54	(50-150)		
DUP_202009030441	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0234	ug/L	106	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0240	ug/L	108	(70-130)	30	2.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00198	ug/L	112	(50-150)		
MS_202009030440	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00230	ug/L	130	(50-150)		
DUP_202009030441	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0239	ug/L	96	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0242	ug/L	97	(70-130)	30	1.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00203	ug/L	102	(50-150)		
MS_202009030440	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00229	ug/L	92	(50-150)		
DUP_202009030441	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0220	ug/L	88	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0217	ug/L	87	(70-130)	30	1.4
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00181	ug/L	91	(50-150)		
MS_202009030440	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00191	ug/L	54	(50-150)		
DUP_202009030441	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0266	ug/L	107	(70-130)	30	1.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00232	ug/L	116	(50-150)		
MS_202009030440	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00288	ug/L	119	(50-150)		
DUP_202009030441	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0251	ug/L	110	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0255	ug/L	112	(70-130)	30	1.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00211	ug/L	116	(50-150)		
MS_202009030440	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00228	ug/L	123	(50-150)		
DUP_202009030441	Perfluorohexanoic acid (PFHxA)	0.0031		0.00317	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0248	ug/L	99	(70-130)	30	6.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS_202009030440	Perfluorohexanoic acid (PFHxA)	0.0021	0.002	0.00429	ug/L	111	(50-150)		
DUP_202009030441	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0256	ug/L	102	(70-130)	30	0.78
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202009030440	Perfluorononanoic acid (PFNA)	ND	0.002	0.00265	ug/L	114	(50-150)		
DUP_202009030441	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0244	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0256	ug/L	110	(70-130)	30	4.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00215	ug/L	116	(50-150)		
MS_202009030440	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00228	ug/L	103	(50-150)		
DUP_202009030441	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0266	ug/L	107	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0272	ug/L	109	(70-130)	30	1.9

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00244	ug/L	122	(50-150)		
MS_202009030440	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00382	ug/L	118	(50-150)		
DUP_202009030441	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0276	ug/L	110	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0321	ug/L	128	(70-130)	30	15
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202009030440	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00299	ug/L	96	(50-150)		
DUP_202009030441	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0221	ug/L	89	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0220	ug/L	88	(70-130)	30	0.45
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00185	ug/L	93	(50-150)		
MS_202009030440	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00189	ug/L	54	(50-150)		
DUP_202009030441	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0240	ug/L	96	(70-130)	30	0.83
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202009030440	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00226	ug/L	77	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1273351 Analytical Batch: 1273976

Analysis Date: 09/10/2020

DUP_202009030452	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0237	ug/L	101	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0241	ug/L	102	(70-130)	30	1.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00178	ug/L	95	(50-150)		
MS2_202009030450	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0471	ug/L	100	(70-130)		
DUP_202009030452	13C2-PFDA (S)			92.3	%	92	(70-130)		
LCS1	13C2-PFDA (S)		100	89.8	%	90	(70-130)		
LCS2	13C2-PFDA (S)		100	93.2	%	93	(70-130)		
MBLK	13C2-PFDA (S)			85.1	%	85	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	90.7	%	91	(70-130)		
MS2_202009030450	13C2-PFDA (S)		100	95.8	%	96	(70-130)		
DUP_202009030452	13C2-PFHxA (S)			93.5	%	93	(70-130)		
LCS1	13C2-PFHxA (S)		100	95.9	%	96	(70-130)		

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	13C2-PFHxA (S)		100	103	%	103	(70-130)		
MBLK	13C2-PFHxA (S)			87.5	%	88	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	98.1	%	98	(70-130)		
MS2_202009030450	13C2-PFHxA (S)		100	96.2	%	96	(70-130)		
DUP_202009030452	13C2-PFOA- IS#1 (I)			120	%	121	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	115	%	115	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			122	%	122	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	112	%	113	(50-150)		
MS2_202009030450	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
DUP_202009030452	13C3-HFPO-DA (S)			89.0	%	89	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	84.0	%	84	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	93.0	%	93	(70-130)		
MBLK	13C3-HFPO-DA (S)			74.1	%	74	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	90.9	%	91	(70-130)		
MS2_202009030450	13C3-HFPO-DA (S)		100	93.2	%	93	(70-130)		
DUP_202009030452	13C4-PFOS- IS#2 (I)			116	%	116	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	108	%	109	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			112	%	112	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
MS2_202009030450	13C4-PFOS- IS#2 (I)		100	109	%	109	(50-150)		
DUP_202009030452	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0250	ug/L	106	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0261	ug/L	111	(70-130)	30	4.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00201	ug/L	107	(50-150)		
MS2_202009030450	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0490	ug/L	101	(70-130)		
DUP_202009030452	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0250	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0255	ug/L	109	(70-130)	30	2.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00192	ug/L	103	(50-150)		
MS2_202009030450	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0489	ug/L	105	(70-130)		
DUP_202009030452	d3-NMeFOSAA (I)			107	%	107	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS2_202009030450	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
DUP_202009030452	d5-NEtFOSAA (S)			97.0	%	97	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	95.5	%	95	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.8	%	98	(70-130)		
MBLK	d5-NEtFOSAA (S)			96.7	%	97	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.4	%	94	(70-130)		
MS2_202009030450	d5-NEtFOSAA (S)		100	97.0	%	97	(70-130)		
DUP_202009030452	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0233	ug/L	93	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0272	ug/L	109	(70-130)	30	15
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00207	ug/L	104	(50-150)		
MS2_202009030450	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0519	ug/L	104	(70-130)		
DUP_202009030452	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0273	ug/L	109	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0276	ug/L	111	(70-130)	30	1.1
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00217	ug/L	109	(50-150)		
MS2_202009030450	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0544	ug/L	109	(70-130)		
DUP_202009030452	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0267	ug/L	107	(70-130)	30	2.6
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	106	(50-150)		
MS2_202009030450	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0527	ug/L	105	(70-130)		
DUP_202009030452	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0250	ug/L	113	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0256	ug/L	116	(70-130)	30	2.4
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00193	ug/L	109	(50-150)		
MS2_202009030450	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0471	ug/L	106	(70-130)		
DUP_202009030452	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0253	ug/L	101	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0255	ug/L	102	(70-130)	30	0.79
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00202	ug/L	101	(50-150)		
MS2_202009030450	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0511	ug/L	102	(70-130)		

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 890914
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202009030452	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0247	ug/L	99	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0251	ug/L	101	(70-130)	30	1.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00198	ug/L	99	(50-150)		
MS2_202009030450	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0488	ug/L	98	(70-130)		
DUP_202009030452	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0279	ug/L	112	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0290	ug/L	116	(70-130)	30	3.9
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00224	ug/L	112	(50-150)		
MS2_202009030450	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0526	ug/L	104	(70-130)		
DUP_202009030452	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0257	ug/L	113	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0259	ug/L	114	(70-130)	30	0.78
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00201	ug/L	110	(50-150)		
MS2_202009030450	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0500	ug/L	110	(70-130)		
DUP_202009030452	Perfluorohexanoic acid (PFHxA)	0.0052		0.00527	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0290	ug/L	116	(70-130)	30	6.4
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00230	ug/L	115	(50-150)		
MS2_202009030450	Perfluorohexanoic acid (PFHxA)	0.0040	0.05	0.0581	ug/L	108	(70-130)		
DUP_202009030452	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0272	ug/L	109	(70-130)	30	3.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00213	ug/L	107	(50-150)		
MS2_202009030450	Perfluorononanoic acid (PFNA)	ND	0.05	0.0528	ug/L	106	(70-130)		
DUP_202009030452	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0259	ug/L	112	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0257	ug/L	111	(70-130)	30	0.78
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00200	ug/L	108	(50-150)		
MS2_202009030450	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0508	ug/L	110	(70-130)		
DUP_202009030452	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0280	ug/L	112	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 890914
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0286	ug/L	114	(70-130)	30	1.8
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00237	ug/L	119	(50-150)		
MS2_202009030450	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0556	ug/L	111	(70-130)		
DUP_202009030452	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0264	ug/L	105	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0280	ug/L	112	(70-130)	30	5.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00268	ug/L	134	(50-150)		
MS2_202009030450	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0498	ug/L	100	(70-130)		
DUP_202009030452	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0246	ug/L	99	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0255	ug/L	102	(70-130)	30	3.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00195	ug/L	98	(50-150)		
MS2_202009030450	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0490	ug/L	98	(70-130)		
DUP_202009030452	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0243	ug/L	97	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0253	ug/L	101	(70-130)	30	4.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00196	ug/L	98	(50-150)		
MS2_202009030450	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0499	ug/L	100	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 09/15/2020

Quant Report - Page 1 of 1

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
Comment: _____
Approved by: _____

Date of Issue: 09/15/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 09/15/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 09/15/2020

Quant Report - Page 1 of 1

, Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-38020-1
Client Project/Site: 890914 - WRD

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
9/15/2020 8:25:33 AM

Lori Thompson, Project Manager I
(714)895-5494
Lori.Thompson@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 890914 - WRD

Job ID: 570-38020-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⊞	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 890914 - WRD

Job ID: 570-38020-1

Job ID: 570-38020-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-38020-1

Comments

No additional comments.

Receipt

The samples were received on 9/9/2020 10:45 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.2° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 890914 - WRD

Job ID: 570-38020-1

Client Sample ID: 202009030444

Lab Sample ID: 570-38020-1

No Detections.

Client Sample ID: 202009030453

Lab Sample ID: 570-38020-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM-SGT: Oil and Grease	1.56		1.20	0.968	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 890914 - WRD

Job ID: 570-38020-1

General Chemistry

Client Sample ID: 202009030444

Date Collected: 09/03/20 08:30

Date Received: 09/09/20 10:45

Lab Sample ID: 570-38020-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM-SGT: Oil and Grease	ND		1.20	0.964	mg/L		09/11/20 07:07	09/11/20 07:07	1

Client Sample ID: 202009030453

Date Collected: 09/03/20 11:55

Date Received: 09/09/20 10:45

Lab Sample ID: 570-38020-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM-SGT: Oil and Grease	1.56		1.20	0.968	mg/L		09/11/20 07:07	09/11/20 07:07	1

QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 890914 - WRD

Job ID: 570-38020-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-93704/1-A
Matrix: Water
Analysis Batch: 93766

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 93704

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM-SGT: Oil and Grease	ND		1.00	0.806	mg/L		09/11/20 07:07	09/11/20 07:07	1

Lab Sample ID: LCS 570-93704/2-A
Matrix: Water
Analysis Batch: 93766

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 93704

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.20		mg/L		93	78 - 114
HEM-SGT: Oil and Grease	20.0	18.50		mg/L		93	64 - 132

Lab Sample ID: LCSD 570-93704/3-A
Matrix: Water
Analysis Batch: 93766

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 93704

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.70		mg/L		94	78 - 114	1	18
HEM-SGT: Oil and Grease	20.0	18.80		mg/L		94	64 - 132	2	34

Lab Sample ID: 570-38020-1 MS
Matrix: Water
Analysis Batch: 93766

Client Sample ID: 202009030456
Prep Type: Total/NA
Prep Batch: 93704

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	2.87		48.3	45.77		mg/L		89	78 - 114
HEM-SGT: Oil and Grease	ND		24.2	22.83		mg/L		95	64 - 132

Lab Sample ID: 570-38020-1 MSD
Matrix: Water
Analysis Batch: 93766

Client Sample ID: 202009030457
Prep Type: Total/NA
Prep Batch: 93704

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	2.87		46.6	43.77		mg/L		88	78 - 114	4	18
HEM-SGT: Oil and Grease	ND		23.3	21.77		mg/L		94	64 - 132	5	34

Lab Sample ID: 570-38020-2 MS
Matrix: Water
Analysis Batch: 93766

Client Sample ID: 202009030454
Prep Type: Total/NA
Prep Batch: 93704

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	3.61		46.8	44.44		mg/L		87	78 - 114
HEM-SGT: Oil and Grease	1.56		23.4	21.99		mg/L		94	64 - 132

Lab Sample ID: 570-38020-2 MSD
Matrix: Water
Analysis Batch: 93766

Client Sample ID: 202009030455
Prep Type: Total/NA
Prep Batch: 93704

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	3.61		43.8	41.29		mg/L		86	78 - 114	7	18
HEM-SGT: Oil and Grease	1.56		21.9	20.70		mg/L		95	64 - 132	6	34

Eurofins Calscience LLC

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 890914 - WRD

Job ID: 570-38020-1

General Chemistry

Prep Batch: 93704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38020-1	202009030444	Total/NA	Water	1664A	
570-38020-2	202009030453	Total/NA	Water	1664A	
MB 570-93704/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-93704/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-93704/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
570-38020-1 MS	202009030456	Total/NA	Water	1664A	
570-38020-1 MSD	202009030457	Total/NA	Water	1664A	
570-38020-2 MS	202009030454	Total/NA	Water	1664A	
570-38020-2 MSD	202009030455	Total/NA	Water	1664A	

Analysis Batch: 93766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38020-1	202009030444	Total/NA	Water	1664A	93704
570-38020-2	202009030453	Total/NA	Water	1664A	93704
MB 570-93704/1-A	Method Blank	Total/NA	Water	1664A	93704
LCS 570-93704/2-A	Lab Control Sample	Total/NA	Water	1664A	93704
LCSD 570-93704/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	93704
570-38020-1 MS	202009030456	Total/NA	Water	1664A	93704
570-38020-1 MSD	202009030457	Total/NA	Water	1664A	93704
570-38020-2 MS	202009030454	Total/NA	Water	1664A	93704
570-38020-2 MSD	202009030455	Total/NA	Water	1664A	93704

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 890914 - WRD

Job ID: 570-38020-1

Client Sample ID: 202009030444

Lab Sample ID: 570-38020-1

Date Collected: 09/03/20 08:30

Matrix: Water

Date Received: 09/09/20 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			836 mL	1000 mL	93704	09/11/20 07:07	ULIN	ECL 1
Total/NA	Analysis	1664A		1			93766	09/11/20 07:07	ULIN	ECL 1

Instrument ID: NOEQUIP

Client Sample ID: 202009030453

Lab Sample ID: 570-38020-2

Date Collected: 09/03/20 11:55

Matrix: Water

Date Received: 09/09/20 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			832 mL	1000 mL	93704	09/11/20 07:07	ULIN	ECL 1
Total/NA	Analysis	1664A		1			93766	09/11/20 07:07	ULIN	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 890914 - WRD

Job ID: 570-38020-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 890914 - WRD

Job ID: 570-38020-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 890914 - WRD

Job ID: 570-38020-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-38020-1	202009030444	Water	09/03/20 08:30	09/09/20 10:45	
570-38020-2	202009030453	Water	09/03/20 11:55	09/09/20 10:45	

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Submittal Form

Date: 9/8/2020

*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder# 890914 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature.

eurolfins Eaton Analytical

Ship To:
Eurofins CalScience
7440 Lincoln Way
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 890914 **Report Due:** 09/18/2020

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: us20_subcontract@eurofins.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix.
Samples from: CALIFORNIA

WRD: please see sample description for MS/MSD samples



570-38020 Chain of Custody

Sample ID 202009030444 **Client Sample ID for reference onl** LH-INF-20200903 **Sample Date & Time Matrix** 09/03/20 0830 DW **PWS Systemcode** PWSID **Static ID:** JLS

Sample type: **Sample Event:** **Facility ID:** **Sample Point ID:**

Method EPA 1664 HEM-SGT **Prep Method** Analysis Requested **Analysis Requested** Oil and Grease by 1664 HEM SGT

Sample ID 202009030453 **Client Sample ID for reference onl** MB-INF-20200903 **Sample Date & Time Matrix** 09/03/20 1155 DW **PWS Systemcode** PWSID **Static ID:** JLS

Sample type: **Sample Event:** **Facility ID:** **Sample Point ID:**

Method EPA 1664 HEM-SGT **Prep Method** Analysis Requested **Analysis Requested** Oil and Grease by 1664 HEM SGT

Sample ID 202009030454 **Client Sample ID for reference onl** MB-INF-20200903 MS **Sample Date & Time Matrix** 09/03/20 1155 DW **PWS Systemcode** PWSID **Static ID:** JLS

Sample type: **Sample Event:** **Facility ID:** **Sample Point ID:**

Method EPA 1664 HEM-SGT **Prep Method** Analysis Requested **Analysis Requested** Oil and Grease by 1664 HEM SGT

Relinquished by: Jackie Contreras Date: 9-8-20 Time: 12:03

Received by: Jackie Contreras Date: 9/9/2020 Time: 10:45

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

2-6/2-2 SGA

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58020

Sample ID: 202009030455
 Client Sample ID for reference on: MB-INF-20200903 MSD
 Sample Date & Time: 09/03/20 1155 DW
 Matrix: PWS Systemcode
 PWSID: JLS

Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Method: Prep Method: Analysis Requested
 EPA 1664 HEM-SGT Oil and Grease by 1664 HEM SGT

Sample ID: 202009030456
 Client Sample ID for reference on: LH-INF-20200903 MS
 Sample Date & Time: 09/03/20 0830 DW
 Matrix: PWS Systemcode
 PWSID: JLS

Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Method: Prep Method: Analysis Requested
 EPA 1664 HEM-SGT Oil and Grease by 1664 HEM SGT

Sample ID: 202009030457
 Client Sample ID for reference on: LH-INF-20200903 MSD
 Sample Date & Time: 09/03/20 0830 DW
 Matrix: PWS Systemcode
 PWSID: JLS

Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Method: Prep Method: Analysis Requested
 EPA 1664 HEM-SGT Oil and Grease by 1664 HEM SGT

Relinquished by: John Sample Control Date: 9-8-20 Time: 1203

Received by: May Date: 9/9/2020 Time: 10:45

Relinquished by: _____ Sample Control Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS
 An Acknowledgement of Receipt is requested to attn: Jackie Contreras

ORIGIN ID: JHFA (626) 386-1100
 MANUEL R. VASQUEZ
 EPIDE INS. ERIDN. ANALYTICAL
 750 ROYAL OAKS DR SUITE 100
 MONROVIA, CA 91016
 UNITED STATES US

SHIP DATE: 08SEP20
 ACTING: 33.55 LB
 CAN: 089410B/CAFE3A13
 DIMS: 24x14x14-IN

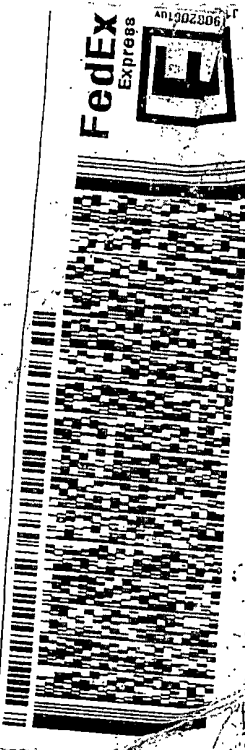
BILL SENDER



570-38020 Waybill

TO **SAMPLE RECEIVING**
GALSCIENCE ENVIRONMENTAL LAB
7440 LINCOLN WAY

GARDEN GROVE CA 928411427
 (714) 895-5484 PO. PM
 DEPT: SUBOUTS/LOG-IN



909 8483 9026
 WED - SEP 10:30A
 PRIORITY
 9 APVA

Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-38020-1

Login Number: 38020

List Source: Eurofins Calscience

List Number: 1

Creator: Cruise, Noel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 891987
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 891987
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **September 10, 2020 at 1307**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202009100507	GAC-1-20200910 Static ID: 537.1 @537.1	09/10/2020 0820
202009100508	GAC-2-20200910 Static ID: 537.1 @537.1	09/10/2020 0823
202009100509	GAC-3-20200910 Static ID: 537.1 @537.1	09/10/2020 0826
202009100510	GAC-4-20200910 Static ID: 537.1 @537.1	09/10/2020 0829
202009100511	IX-1-20200910 Static ID: 537.1 @537.1	09/10/2020 0832
202009100512	IX-2-20200910 Static ID: 537.1 @537.1	09/10/2020 0835
202009100513	IX-3-20200910 Static ID: 537.1 @537.1	09/10/2020 0838
202009100514	IX-4-20200910 Static ID: 537.1 @537.1	09/10/2020 0841
202009100515	LH-INF-20200910 @537.1 Chloride @ANIONS48 Sulfate Alkalinity in CaCO3 units Total Organic Carbon	09/10/2020 0844
202009100516	GAC-5-20200910 @537.1	09/10/2020 1100
202009100517	GAC-6-20200910 @537.1	09/10/2020 1103

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 891987
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **September 10, 2020 at 1307**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202009100518</u>	GAC-7-20200910	09/10/2020 1106
	@537.1	
<u>202009100519</u>	GAC-8-20200910	09/10/2020 1109
	@537.1	
<u>202009100520</u>	IX-5-20200910	09/10/2020 1112
	@537.1	
<u>202009100521</u>	IX-6-20200910	09/10/2020 1115
	@537.1	
<u>202009100522</u>	IX-7-20200910	09/10/2020 1118
	@537.1	
<u>202009100523</u>	IX-8-20200910	09/10/2020 1121
	@537.1	
<u>202009100524</u>	MB-INF-20200910	09/10/2020 1124
	@537.1	
	Chloride	
	@ANIONS48	Alkalinity in CaCO3 units
	Sulfate	Total Organic Carbon

Test Description

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

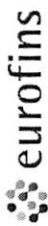
88198A

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot	
LABORATORY: Eurofins Eaton Analytical (949) 679-1070 E-MAIL: mjeon@gsi-net.com		PROJECT NO.: 5302	
GLOBAL ID: mjeon@gsi-net.com		LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) <i>BC</i>	
REQUESTED ANALYSES Please check box or fill in blank as needed.			
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD	SPECIAL INSTRUCTIONS: Send report copies to pegalwin@gsi-net.com, mjeon@gsi-net.com, & rdorres@gsi-net.com. Provide EDD of sample results	<input type="checkbox"/> PFAS - full list (EPA 537.1)	<input type="checkbox"/> Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)
		<input type="checkbox"/> Alkalinity (as CaCO3), (SM 2320B)	<input type="checkbox"/> TOC (SM 5310C)
NO. OF CONT.	MATRIX	Unpreserved	Preserved
DATE	SAMPLING TIME	Field Filtered	Time
SAMPLE ID	DATE	MATRIX	NO. OF CONT.
GAC-1 - 20200910	9/10/20 820	Water	2
GAC-2 - 20200910	823	Water	2
GAC-3 - 20200910	826	Water	2
GAC-4 - 20200910	829	Water	2
IX-1 - 20200910	832	Water	2
IX-2 - 20200910	835	Water	2
IX-3 - 20200910	838	Water	2
IX-4 - 20200910	841	Water	2
LH-INF - 20200910	844	Water	2
LH-INF-DUP <i>BC</i>	844	Water	2
GAC-5 - 20200910	9/10/20 1100	Water	2
GAC-6 - 20200910	1103	Water	2
GAC-7 - 20200910	1106	Water	2
GAC-8 - 20200910	1109	Water	2
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature)	
Relinquished by: (Signature)		Received by: (Signature) <i>[Signature]</i>	
Relinquished by: (Signature)		Received by: (Signature)	

271019

Date: 9/10/20 Time: 1306
 Date: 9/10/20 Time: 1307
 Date: _____ Time: _____

4401



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 51997

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 609A (Observation = 6.1 °C) (Corr. Factor = 2 °C) (Final = 15.9 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA and Radon Headspace:

No Samples with Headspace:

Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, international clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: [Signature] SIGNATURE

COMPANY/TITLE: Eurofins Eaton Analytical

DATE: 9/10/20

TIME: 13:07

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 891987
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
09/14/2020 19:30	Perfluorohexanoic acid (PFHxA)	202009100511 IX-1-20200910	0.0022		ug/L	0.0020
09/14/2020 19:39	Perfluorohexanoic acid (PFHxA)	202009100512 IX-2-20200910	0.0036		ug/L	0.0020
09/14/2020 19:49	Perfluorohexanoic acid (PFHxA)	202009100513 IX-3-20200910	0.0037		ug/L	0.0020
09/14/2020 19:59	Perfluorohexanoic acid (PFHxA)	202009100514 IX-4-20200910	0.0035		ug/L	0.0020
09/17/2020 21:12	Alkalinity in CaCO3 units	202009100515 LH-INF-20200910	200		mg/L	2.0
09/10/2020 19:56	Chloride		110	250	mg/L	2.5
09/10/2020 19:56	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
09/10/2020 19:56	Nitrate as NO3 (calc)		12	45	mg/L	2.2
09/14/2020 20:18	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
09/14/2020 20:18	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
09/14/2020 20:18	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
09/14/2020 20:18	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
09/14/2020 20:18	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
09/14/2020 20:18	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
09/10/2020 19:56	Sulfate		180	250	mg/L	2.5
09/10/2020 19:56	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
09/18/2020 03:05	Total Organic Carbon		0.78		mg/L	0.20
09/14/2020 20:27	Perfluorobutanesulfonic acid (PFBS)	202009100516 GAC-5-20200910	0.0040		ug/L	0.0020
09/14/2020 20:27	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
09/14/2020 20:27	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
09/14/2020 20:46	Perfluorobutanesulfonic acid (PFBS)	202009100518 GAC-7-20200910	0.0051		ug/L	0.0020
09/14/2020 20:46	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
09/14/2020 18:32	Perfluorohexanoic acid (PFHxA)	202009100520 IX-5-20200910	0.0028		ug/L	0.0020
09/14/2020 20:56	Perfluorohexanoic acid (PFHxA)	202009100521 IX-6-20200910	0.0050		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202009100522				
		<u>IX-7-20200910</u>				
09/14/2020 21:05	Perfluorohexanoic acid (PFHxA)		0.0048		ug/L	0.0020
		202009100523				
		<u>IX-8-20200910</u>				
09/14/2020 21:15	Perfluorohexanoic acid (PFHxA)		0.0056		ug/L	0.0020
		202009100524				
		<u>MB-INF-20200910</u>				
09/17/2020 20:38	Alkalinity in CaCO3 units		170		mg/L	2.0
09/10/2020 20:35	Chloride		47	250	mg/L	2.5
09/10/2020 20:35	Nitrate as Nitrogen by IC		2.7	10	mg/L	0.50
09/10/2020 20:35	Nitrate as NO3 (calc)		12	45	mg/L	2.2
09/14/2020 21:25	Perfluorobutanesulfonic acid (PFBS)		0.0087		ug/L	0.0020
09/14/2020 21:25	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
09/14/2020 21:25	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
09/14/2020 21:25	Perfluorohexanoic acid (PFHxA)		0.0059		ug/L	0.0020
09/14/2020 21:25	Perfluorononanoic acid (PFNA)		0.0037		ug/L	0.0020
09/14/2020 21:25	Perfluorooctanesulfonic acid (PFOS)		0.036		ug/L	0.0020
09/14/2020 21:25	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
09/10/2020 20:35	Sulfate		75	250	mg/L	2.5
09/10/2020 20:35	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
09/18/2020 03:22	Total Organic Carbon		0.92		mg/L	0.20

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Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200910 (202009100507)					Sampled on 09/10/2020 0820				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	13C2-PFDA	82	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	13C2-PFHxA	98	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	89	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	104	%		1
09/11/20	09/14/20 18:51	1273955	1274514	(EPA 537.1)	d5-NEFOSAA	94	%		1

GAC-2-20200910 (202009100508)					Sampled on 09/10/2020 0823				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	13C2-PFDA	72	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	13C2-PFHxA	87	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	130	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	77	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	106	%		1
09/11/20	09/14/20 19:01	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	91	%		1

GAC-3-20200910 (202009100509)

Sampled on 09/10/2020 0826

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

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Water Replenishment District
 Joseph Liles
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 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	13C2-PFDA	76	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	13C2-PFHxA	91	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	125	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	81	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	106	%		1
09/11/20	09/14/20 19:11	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	93	%		1

GAC-4-20200910 (202009100510)

Sampled on 09/10/2020 0829

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

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Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	13C2-PFDA	79	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	13C2-PFHxA	92	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	83	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	104	%		1
09/11/20	09/14/20 19:20	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	91	%		1

IX-1-20200910 (202009100511)

Static ID: 537.1

Sampled on 09/10/2020 0832

EPA 537.1 - EPA Method 537.1

09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	13C2-PFDA	80	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	13C2-PFHxA	92	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	82	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	112	%		1
09/11/20	09/14/20 19:30	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	92	%		1

IX-2-20200910 (202009100512)

Sampled on 09/10/2020 0835

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	13C2-PFDA	104	%		1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	13C2-PFHxA	93	%		1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	129	%		1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	82	%		1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	120	%		1
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	121	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:39	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	126	%		1
IX-3-20200910 (202009100513)						Sampled on 09/10/2020 0838			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	13C2-PFDA	84	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	13C2-PFHxA	97	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	87	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	114	%		1
09/11/20	09/14/20 19:49	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	89	%		1

IX-4-20200910 (202009100514)						Sampled on 09/10/2020 0841			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	13C2-PFDA	78	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	13C2-PFHxA	96	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	87	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	112	%		1
09/11/20	09/14/20 19:59	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	81	%		1

LH-INF-20200910 (202009100515)

Sampled on 09/10/2020 0844

SM 5310C - Total Organic Carbon

09/18/20 03:05	1275257	(SM 5310C)	Total Organic Carbon	0.78	mg/L	0.20	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

09/10/20 19:56	1273942	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
09/10/20 19:56	1273942	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
09/10/20 19:56	1273942	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
09/10/20 19:56	1273942	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

09/10/20 19:56	1273943	(EPA 300.0)	Chloride	110	mg/L	2.5	5
09/10/20 19:56	1273943	(EPA 300.0)	Sulfate	180	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

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Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	13C2-PFDA	87	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	13C2-PFHxA	96	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	87	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	113	%		1
09/11/20	09/14/20 20:18	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	93	%		1

SM 2320B - Alkalinity in CaCO3 units

09/17/20 21:12	1275412	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
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GAC-5-20200910 (202009100516)

Sampled on 09/10/2020 1100

EPA 537.1 - EPA Method 537.1

09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

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Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0040	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	13C2-PFDA	80	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	13C2-PFHxA	92	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	82	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	109	%		1
09/11/20	09/14/20 20:27	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	88	%		1

GAC-6-20200910 (202009100517)

Sampled on 09/10/2020 1103

EPA 537.1 - EPA Method 537.1

09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	13C2-PFDA	78	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	13C2-PFHxA	92	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	83	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	113	%		1
09/11/20	09/14/20 20:37	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	89	%		1

GAC-7-20200910 (202009100518)

Sampled on 09/10/2020 1106

EPA 537.1 - EPA Method 537.1

09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0051	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	13C2-PFDA	82	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	13C2-PFHxA	96	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	85	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	111	%		1
09/11/20	09/14/20 20:46	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	92	%		1

GAC-8-20200910 (202009100519)

Sampled on 09/10/2020 1109

EPA 537.1 - EPA Method 537.1

09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	13C2-PFDA	85	%		1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	13C2-PFHxA	101	%		1

Rounding on totals after summation.
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Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	90	%		1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	104	%		1
09/11/20	09/14/20 18:13	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	96	%		1

IX-5-20200910 (202009100520)

Sampled on 09/10/2020 1112

EPA 537.1 - EPA Method 537.1

09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	13C2-PFDA	84	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	13C2-PFHxA	93	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	86	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	105	%		1
09/11/20	09/14/20 18:32	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	91	%		1

IX-6-20200910 (202009100521)

Sampled on 09/10/2020 1115

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0050	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	13C2-PFDA	83	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	13C2-PFHxA	93	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	125	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	83	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	114	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	115	%		1
09/11/20	09/14/20 20:56	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	93	%		1

IX-7-20200910 (202009100522)

Sampled on 09/10/2020 1118

EPA 537.1 - EPA Method 537.1									
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0048	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	13C2-PFDA	79	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	13C2-PFHxA	83	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	140	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	75	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	112	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/11/20	09/14/20 21:05	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	97	%		1

IX-8-20200910 (202009100523)

Sampled on 09/10/2020 1121

EPA 537.1 - EPA Method 537.1

09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0056	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	13C2-PFDA	86	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	13C2-PFHxA	97	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	85	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	115	%		1
09/11/20	09/14/20 21:15	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	93	%		1

MB-INF-20200910 (202009100524)

Sampled on 09/10/2020 1124

SM 5310C - Total Organic Carbon

09/18/20 03:22	1275257	(SM 5310C)	Total Organic Carbon	0.92	mg/L	0.20	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

09/10/20 20:35	1273942	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	0.50	5
09/10/20 20:35	1273942	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
09/10/20 20:35	1273942	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
09/10/20 20:35	1273942	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

09/10/20 20:35	1273943	(EPA 300.0)	Chloride	47	mg/L	2.5	5
09/10/20 20:35	1273943	(EPA 300.0)	Sulfate	75	mg/L	2.5	5

EPA 537.1 - EPA Method 537.1

09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/10/2020 1307

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0087	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0059	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0037	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.036	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	13C2-PFDA	85	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	13C2-PFHxA	92	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	13C2-PFOA- IS#1	121	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	13C3-HFPO-DA	82	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	13C4-PFOS- IS#2	118	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/11/20	09/14/20 21:25	1273955	1274514	(EPA 537.1)	d5-NEtFOSAA	89	%		1
SM 2320B - Alkalinity in CaCO3 units									
	09/17/20 20:38		1275412	(SM 2320B)	Alkalinity in CaCO3 units	170	mg/L	2.0	1

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Report: 891987
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0**Analytical Batch: 1273942**

202009100515 LH-INF-20200910
202009100524 MB-INF-20200910

Analysis Date: 09/10/2020

Analyzed by: HL7J
Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0**Analytical Batch: 1273943**

202009100515 LH-INF-20200910
202009100524 MB-INF-20200910

Analysis Date: 09/10/2020

Analyzed by: HL7J
Analyzed by: HL7J

EPA Method 537.1**Prep Batch: 1273955 Analytical Batch: 1274514**

202009100507 GAC-1-20200910
202009100508 GAC-2-20200910
202009100509 GAC-3-20200910
202009100510 GAC-4-20200910
202009100511 IX-1-20200910
202009100512 IX-2-20200910
202009100513 IX-3-20200910
202009100514 IX-4-20200910
202009100515 LH-INF-20200910
202009100516 GAC-5-20200910
202009100517 GAC-6-20200910
202009100518 GAC-7-20200910
202009100519 GAC-8-20200910
202009100520 IX-5-20200910
202009100521 IX-6-20200910
202009100522 IX-7-20200910
202009100523 IX-8-20200910
202009100524 MB-INF-20200910

Analysis Date: 09/14/2020

Analyzed by: Y7BM
Analyzed by: Y7BM
Analyzed by: Y7BM
Analyzed by: Y7BM
Analyzed by: Y7BM
Analyzed by: Y7BM
Analyzed by: Y7BM
Analyzed by: Y7BM
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Analyzed by: Y7BM
Analyzed by: Y7BM
Analyzed by: Y7BM
Analyzed by: Y7BM

Total Organic Carbon**Analytical Batch: 1275257**

202009100515 LH-INF-20200910
202009100524 MB-INF-20200910

Analysis Date: 09/18/2020

Analyzed by: ZB2Z
Analyzed by: ZB2Z

Alkalinity in CaCO3 units**Analytical Batch: 1275412**

202009100515 LH-INF-20200910
202009100524 MB-INF-20200910

Analysis Date: 09/17/2020

Analyzed by: ZS6I
Analyzed by: ZS6I

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1273942					Analysis Date: 09/10/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.54	mg/L	102	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.53	mg/L	101	(90-110)	20	0.39
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0480	mg/L	96	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0122	mg/L	98	(50-150)		
MS_202009100352	Nitrate as Nitrogen by IC	3.3	2.6	6.06	mg/L	110	(80-120)		
MS_202009100515	Nitrate as Nitrogen by IC	2.8	6.5	9.45	mg/L	106	(80-120)		
MSD_202009100352	Nitrate as Nitrogen by IC	3.3	2.6	6.07	mg/L	110	(80-120)	20	0.22
MSD_202009100515	Nitrate as Nitrogen by IC	2.8	6.5	9.51	mg/L	107	(80-120)	20	0.59
LCS1	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0497	mg/L	99	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0137	mg/L	110	(50-150)		
MS_202009100352	Nitrite Nitrogen by IC	ND	1	1.04	mg/L	104	(80-120)		
MS_202009100515	Nitrite Nitrogen by IC	ND	2.5	2.58	mg/L	103	(80-120)		
MSD_202009100352	Nitrite Nitrogen by IC	ND	1	1.05	mg/L	105	(80-120)	20	0.82
MSD_202009100515	Nitrite Nitrogen by IC	ND	2.5	2.60	mg/L	104	(80-120)	20	0.63
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1273943					Analysis Date: 09/10/2020				
LCS1	Chloride		25	26.4	mg/L	106	(90-110)		
LCS2	Chloride		25	26.3	mg/L	105	(90-110)	20	0.38
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.446	mg/L	89	(50-150)		
MS_202009100515	Chloride	110	65	178	mg/L	109	(80-120)		
MS_202009110264	Chloride	70	26	95.9	mg/L	104	(80-120)		
MSD_202009100515	Chloride	110	65	179	mg/L	110	(80-120)	20	0.36
MSD_202009110264	Chloride	70	26	95.9	mg/L	104	(80-120)	20	0.022
LCS1	Sulfate		50	52.0	mg/L	104	(90-110)		
LCS2	Sulfate		50	51.8	mg/L	104	(90-110)	20	0.39
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.966	mg/L	97	(50-150)		
MRL_W	Sulfate		0.25	0.235	mg/L	94	(50-150)		
MS_202009100515	Sulfate	180	125	316	mg/L	109	(80-120)		

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Report: 891987
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202009110264	Sulfate	160	50	ND	mg/L	104	(80-120)		
MSD_202009100515	Sulfate	180	125	317	mg/L	110	(80-120)	20	0.33
MSD_202009110264	Sulfate	160	50	ND	mg/L	104	(80-120)	20	0.20

EPA Method 537.1 by EPA 537.1

Prep Batch: 1273955 Analytical Batch: 1274514

Analysis Date: 09/14/2020

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202009100520	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0423	ug/L	90	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0423	ug/L	90	(70-130)	30	0.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00171	ug/L	91	(50-150)		
MS_202009100519	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00171	ug/L	90	(50-150)		
DUP_202009100520	13C2-PFDA (S)			88.0	%	88	(70-130)		
LCS3	13C2-PFDA (S)		100	87.2	%	87	(70-130)		
LCS4	13C2-PFDA (S)		100	83.2	%	83	(70-130)		
MBLK	13C2-PFDA (S)			85.5	%	86	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	82.2	%	82	(70-130)		
MS_202009100519	13C2-PFDA (S)		100	82.1	%	82	(70-130)		
DUP_202009100520	13C2-PFHxA (S)			97.9	%	98	(70-130)		
LCS3	13C2-PFHxA (S)		100	105	%	105	(70-130)		
LCS4	13C2-PFHxA (S)		100	100	%	100	(70-130)		
MBLK	13C2-PFHxA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	99.2	%	99	(70-130)		
MS_202009100519	13C2-PFHxA (S)		100	99.9	%	100	(70-130)		
DUP_202009100520	13C2-PFOA- IS#1 (I)			117	%	117	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS_202009100519	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
DUP_202009100520	13C3-HFPO-DA (S)			88.4	%	88	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	93.1	%	93	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	89.7	%	90	(70-130)		
MBLK	13C3-HFPO-DA (S)			90.5	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	86.4	%	86	(70-130)		
MS_202009100519	13C3-HFPO-DA (S)		100	88.9	%	89	(70-130)		
DUP_202009100520	13C4-PFOS- IS#2 (I)			111	%	111	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	98.7	%	99	(50-150)		

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 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	13C4-PFOS- IS#2 (I)		100	99.6	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.9	%	99	(50-150)		
MS_202009100519	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
DUP_202009100520	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0478	ug/L	99	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0476	ug/L	98	(70-130)	30	0.42
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00210	ug/L	111	(50-150)		
MS_202009100519	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00223	ug/L	117	(50-150)		
DUP_202009100520	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0435	ug/L	93	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0439	ug/L	94	(70-130)	30	0.92
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00184	ug/L	99	(50-150)		
MS_202009100519	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00186	ug/L	99	(50-150)		
DUP_202009100520	d3-NMeFOSAA (I)			105	%	105	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	95.1	%	95	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	97.4	%	97	(50-150)		
MBLK	d3-NMeFOSAA (I)			102	%	102	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	89.2	%	89	(50-150)		
MS_202009100519	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
DUP_202009100520	d5-NEtFOSAA (S)			93.5	%	93	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	90.3	%	90	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	91.6	%	92	(70-130)		
MBLK	d5-NEtFOSAA (S)			90.6	%	91	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.2	%	94	(70-130)		
MS_202009100519	d5-NEtFOSAA (S)		100	89.6	%	90	(70-130)		
DUP_202009100520	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0472	ug/L	95	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0477	ug/L	95	(70-130)	30	1.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202009100519	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00221	ug/L	110	(50-150)		
DUP_202009100520	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0474	ug/L	95	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0488	ug/L	98	(70-130)	30	2.9
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 891987
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00217	ug/L	108	(50-150)		
MS_202009100519	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00221	ug/L	109	(50-150)		
DUP_202009100520	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0487	ug/L	97	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0489	ug/L	98	(70-130)	30	0.41
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		
MS_202009100519	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00229	ug/L	112	(50-150)		
DUP_202009100520	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0452	ug/L	102	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0456	ug/L	103	(70-130)	30	0.88
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00196	ug/L	111	(50-150)		
MS_202009100519	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00273	ug/L	133	(50-150)		
DUP_202009100520	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0449	ug/L	90	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0457	ug/L	91	(70-130)	30	1.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00190	ug/L	95	(50-150)		
MS_202009100519	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00199	ug/L	98	(50-150)		
DUP_202009100520	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0426	ug/L	85	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0416	ug/L	83	(70-130)	30	2.4
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00174	ug/L	87	(50-150)		
MS_202009100519	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00178	ug/L	88	(50-150)		
DUP_202009100520	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0535	ug/L	107	(70-130)	30	2.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00233	ug/L	116	(50-150)		
MS_202009100519	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00264	ug/L	130	(50-150)		
DUP_202009100520	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0484	ug/L	106	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0495	ug/L	109	(70-130)	30	2.3
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00207	ug/L	114	(50-150)		
MS_202009100519	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00230	ug/L	125	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202009100520	Perfluorohexanoic acid (PFHxA)	0.0028		0.00290	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0543	ug/L	109	(70-130)	30	3.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202009100519	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00330	ug/L	139	(50-150)		
DUP_202009100520	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0487	ug/L	97	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0494	ug/L	99	(70-130)	30	1.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00213	ug/L	107	(50-150)		
MS_202009100519	Perfluorononanoic acid (PFNA)	ND	0.002	0.00228	ug/L	113	(50-150)		
DUP_202009100520	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0479	ug/L	104	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0490	ug/L	106	(70-130)	30	2.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00208	ug/L	112	(50-150)		
MS_202009100519	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00260	ug/L	92	(50-150)		
DUP_202009100520	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0503	ug/L	101	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0502	ug/L	100	(70-130)	30	0.20
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202009100519	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00258	ug/L	123	(50-150)		
DUP_202009100520	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0512	ug/L	102	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0522	ug/L	104	(70-130)	30	1.9
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00213	ug/L	106	(50-150)		
MS_202009100519	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00218	ug/L	106	(50-150)		
DUP_202009100520	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0420	ug/L	84	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0414	ug/L	83	(70-130)	30	1.4
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00173	ug/L	86	(50-150)		
MS_202009100519	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00177	ug/L	87	(50-150)		
DUP_202009100520	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0449	ug/L	90	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0455	ug/L	91	(70-130)	30	1.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00186	ug/L	93	(50-150)		
MS_202009100519	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00199	ug/L	98	(50-150)		

Total Organic Carbon by SM 5310C

Analytical Batch: 1275257

Analysis Date: 09/18/2020

LCS1	Total Organic Carbon		5	5.11	mg/L	102	(90-110)		
LCS2	Total Organic Carbon		5	5.14	mg/L	103	(90-110)	20	0.59
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.279	mg/L	140	(50-150)		
MS_202009030014	Total Organic Carbon	3.3	4	7.36	mg/L	101	(80-120)		
MSD_202009030014	Total Organic Carbon	3.3	4	7.47	mg/L	104	(80-120)	20	1.5

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1275412

Analysis Date: 09/17/2020

LCS1	Alkalinity in CaCO3 units		100	99.0	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	99.9	mg/L	100	(90-110)	20	0.91
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.78	mg/L	89	(50-150)		
MS_202008210443	Alkalinity in CaCO3 units	220	100	297	mg/L	<u>77</u>	(80-120)		
MS_202009090265	Alkalinity in CaCO3 units	110	100	188	mg/L	80	(80-120)		
MSD_202008210443	Alkalinity in CaCO3 units	220	100	294	mg/L	<u>74</u>	(80-120)	20	1.1
MSD_202009090265	Alkalinity in CaCO3 units	110	100	191	mg/L	83	(80-120)	20	1.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 09/18/2020

Quant Report - Page 1 of 1

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
Comment: _____
Approved by: _____

Date of Issue: 09/18/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 09/18/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

Colilert Report - Page 1 of 1

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 09/18/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 893261
Project: 0250000
Group: WRD Pilot [Set #1]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 893261
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **September 17, 2020 at 1302**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202009170160</u>	GAC-1-20200917	09/17/2020 0803
	@537.1	
<u>202009170161</u>	GAC-2-20200917	09/17/2020 0806
	@537.1	
<u>202009170162</u>	GAC-3-20200917	09/17/2020 0809
	@537.1	
<u>202009170163</u>	GAC-4-20200917	09/17/2020 0812
	@537.1	
<u>202009170164</u>	IX-1-20200917	09/17/2020 0815
	@537.1	
<u>202009170165</u>	IX-2-20200917	09/17/2020 0818
	@537.1	
<u>202009170166</u>	IX-3-20200917	09/17/2020 0821
	@537.1	
<u>202009170167</u>	IX-4-20200917	09/17/2020 0824
	@537.1	
<u>202009170169</u>	LH-INF-20200917	09/17/2020 0827
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Calcium Total ICAP
	Hexavalent chromium(Dissolved)	Iron Total ICAP
	Magnesium Total ICAP	Oil and Grease by 1664(subbed)
	Manganese Total ICAP/MS	Sodium Total ICAP
	Perchlorate	Potassium Total ICAP
	Sulfate	Total Dissolved Solid (TDS)
	Total Hardness as CaCO3 by ICP	Total Suspended Solids (TSS)
	Total Organic Carbon	Uranium by ICPMS as pCi/L
	Uranium ICAP/MS	
<u>202009170171</u>	GAC-5-20200917	09/17/2020 1003
	@537.1	
<u>202009170172</u>	GAC-6-20200917	09/17/2020 1006

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 893261
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **September 17, 2020 at 1302**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202009170173	GAC-7-20200917	09/17/2020 1009
	@537.1	
202009170174	GAC-8-20200917	09/17/2020 1012
	@537.1	
202009170175	IX-5-20200917	09/17/2020 1015
	@537.1	
202009170176	IX-6-20200917	09/17/2020 1018
	@537.1	
202009170177	IX-7-20200917	09/17/2020 1021
	@537.1	
202009170178	IX-8-20200917	09/17/2020 1024
	@537.1	
202009170179	MB-INF-20200917	09/17/2020 1027
	@537.1	
	Alkalinity in CaCO3 units	@ANIONS48
	Chloride	Arsenic Total ICAP/MS
	Magnesium Total ICAP	Hexavalent chromium(Dissolved)
	Perchlorate	Iron Total ICAP
	Sulfate	Manganese Total ICAP/MS
	Total Organic Carbon	Potassium Total ICAP
	Uranium ICAP/MS	Oil and Grease by 1664(subbed)
		Sodium Total ICAP
		Total Dissolved Solid (TDS)
		Total Hardness as CaCO3 by ICP
		Uranium by ICPMS as pCi/L
202009170180	MB-INF-DUP-20200917	09/17/2020 1030
	@537.1	
202009170181	FB - 20200917 - HOLD	09/17/2020 1033
	@537.1 FB	

Test Description

@537.1 -- EPA Method 537.1

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 893261
Project: 0250000
Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **September 17, 2020 at 1302**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1 FB -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	
	@VOASDWA -- Volatile Organics by GCMS	



893261

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302	
LABORATORY: Eurofins Eaton Analytical		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang	
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) RDT	
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		SAMPLING DATE		SAMPLING TIME	
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results		NO. OF CONT.		MATRIX	
LAB USE ONLY	SAMPLE ID	DATE	TIME	MATRIX	NO. OF CONT.
	GAC-1 - 20200917	9-17	0803	Water	2
	GAC-2 - 20200917		0806	Water	2
	GAC-3 - 20200917		0809	Water	2
	GAC-4 - 20200917		0812	Water	2
	IX-1 - 20200917		0815	Water	2
	IX-2 - 20200917		0818	Water	2
	IX-3 - 20200917		0821	Water	2
	IX-4 - 20200917		0824	Water	2
	LH-INF-20200917		0827	Water	14
	LH-INF-DUP			Water	
	GAC-5 - 20200917	9-17	1003	Water	2
	GAC-6 - 20200917		1006	Water	2
	GAC-7 - 20200917		1009	Water	2
	GAC-8 - 20200917		1012	Water	2
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature)		Date: 9-17-2020	
Relinquished by: (Signature)		Received by: (Signature) <i>Charles Beech</i>		Date: 9-17-2020	
Relinquished by: (Signature)		Received by: (Signature)		Date: 9-17-2020	

REQUESTED ANALYSES
 Please check box or fill in blank as needed.

PFAS - full list (EPA 537.1)	X
Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	
Alkalinity (as CaCO3), (SM 2320B)	X
Uranium, Arsenic, Manganese (EPA 200.8)	X
Perchlorate (EPA 314.0)	X
Hexavalent Chromium (EPA 218.6)	X
Fe, Na, K, Ca, Mg (EPA 200.7)	X
Total Hardness as CaCO3 (SM 2340B)	X
VOCs (EPA 524.2)	X
TOC (SM 5310C)	X
TDS (E160.1/SM 2540C)	X
TSS (SM 2540D)	X
Oil & Grease (EPA 1664)	X

Unpreserved
 Preserved
 Field Filtered

Time: 1301
 Date: 9-17-2020
 Time: 1302
 Date: 9-17-2020

853261

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) RBT																
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rtorres@gsi-net.com; Provide EDD of sample results		REQUESTED ANALYSES Please check box or fill in blank as needed.																		
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 72 HR <input type="checkbox"/> 24 HR <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD		Unpreserved Preserved Field Filtered																		
LAB USE ONLY	SAMPLE ID	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)		
	IX-5 - 20200917	9-17	1015	Water	2	X														
	IX-6 - 20200917		1018	Water	2	X														
	IX-7 - 20200917		1021	Water	2	X														
	IX-8 - 20200917		1024	Water	2	X														
	MB-INF - 20200917		1027	Water	14	X														
	MB-INF-DUP - 20200917		1030	Water	2	X														
	FB - 20200917		1033	Water	1	X														
Relinquished by: (Signature) <u>RBT</u> <u>Zms</u>						Received by: (Signature) _____						Date: 9-17-2020		Time: 1301						
Relinquished by: (Signature) _____						Received by: (Signature) <u>Alvin Proctor</u> <u>HTB</u>						Date: 9-17-20		Time: 1302						
Relinquished by: (Signature) _____						Received by: (Signature) _____						Date: _____		Time: _____						

INTERNAL CHAIN OF CUSTODY RECORD

eurofins | Eaton Analytical

EEA Folder Number: 893261

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 631 (Observation = 2.8 °C) (Corr. Factor = 0.11 °C) (Final = 2.7 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA and Radon Headspace: No Samples with Headspace: Samples with Headspace (see below):

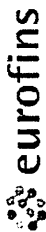
Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Sample ID	Bottle #	None/<6	>6mm	Sample ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: Chuck Boech PRINT NAME: Chuck Boech COMPANY/TITLE: Eurofins Eaton Analytical DATE: 9.17.20 TIME: 1302



Eaton Analytical

Kit Order for Water Replenishment District
 Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
 Monrovia, California 91016-3629
 (626) 386-1100 FAX (866) 988-3757

Created Date & Time: 8/21/2020 4:17:12PM

Note: Sampler Please return this paper with your samples

Client ID: WRD



Project Code: 0250000 Bottle Orders

Group Name: WRD Pilot [Set #1]

PO#/JOB#:

Description: WRD Pilot [Set #1]

Shipping Method: Pickup by client



Kit #: 271020

Created By: Anisha Zachariah - [ZR4B]

Deliver By: 09/03/2020

STG: Bottle Orders

Ice Type: G

Ship Sample Kits to
 GSI Environmental Inc.

Attr: Robert Torres
 Phone: 951-616-8406

Send Report to
 Water Replenishment District
 4040 Paramount Blvd.
 Lakewood, CA 90712

Attr: Joseph Liles
 Phone: 562-275-4226

Billing Address
 Water Replenishment District

Attr: Eurofins Calscience

Water Replenishment District
 4040 Paramount Blvd
 Lakewood, CA 90712

Attr: Brian Partington
 Phone: 562-275-4249
 Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
2	Total Organic Carbon	2	UN1830
2	1 - 125ml amber glass [0.5 ml H2SO4 (50%)]		
2	Hexavalent Chromium (Dissolved)	2	
2	1 - 125ml poly [1.25 ml NH4SO4/NH4OH buffer]		
2	@ANIONS48, Chloride, Sulfate	2	
2	1 - 125ml poly [no preservative]		
2	Perchlorate	2	
2	1 - 125ml poly [no preservative]		
2	Oil and Grease by 1664(subbed)	4	
2	2 - 1L amber glass [H2SO4 4 ml 50% H2SO4 & 4C]		
2	Alkalinity in CaCO3 units	2	
4	1 - 250ml poly [no preservative]		
2	@537.1	8	
2	2 - 275 ml polypro w polypro cap [1.4 g Trisma]		
2	@VOASDWA	6	UN1789
2	3 - 40ml amber glass vial [4drops 6N HCL (36%)]		
2	Arsenic Total ICAP/MS, Calcium Total ICAP, Iron Total ICAP, Magnesium Total ICAP, Manganese Total ICAP/MS, Potassium Total ICAP, Sodium Total ICAP, Uranium by ICP/MS as pCi/L, Uranium ICAP/MS	2	UN2031
2	1 - 500ml acid poly [2ml HNO3 (18%)]		
2	Total Dissolved Solid (TDS), Total Suspended Solids (TSS)	2	
2	1 - 500ml poly [no preservative]		

Sum Tests: 22

Sum Bottles: 32

Comments



Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 8/21/2020 4:17:12PM

Note: Sampler Please return this paper with your samples

Client ID: WRD

Kit #: 271020



Project Code: 0250000 Bottle Orders

Created By: Anisha Zachariah - [ZR4B]

Deliver By: 09/03/2020

STG: Bottle Orders

Ice Type: G

Group Name: WRD Pilot [Set #1]

PO#/JOB#:

Description: WRD Pilot [Set #1]

Shipping Method: Pickup by client

Ship Sample Kits to
GSI Environmental Inc.

Attn: Robert Torres
Phone: 951-616-8406

Send Report to
Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712

Attn: Joseph Liles
Phone: 562-275-4226

Billing Address
Water Replenishment District

Attn: Eurofins Calscience

Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712

Attn: Brian Partington
Phone: 562-275-4249
Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
SHIPPING: - CLIENT P/U THURSDAY, AUGUST 6TH MORNING - PACKAGE IN 2 x 48QT COOLERS GSI SAMPLER: - PLEASE MAKE SURE TO RETURN THIS KIT DOCUMENT AND COC ALONG WITH THE SAMPLES. - NITRATE/NITRITE ONLY HAS 48 HOURS HOLDING TIME SO PLEASE ENSURE SAMPLES ARRIVE BACK AT THE LAB ASAP. ASM: •Please also send invoices to Miae Jeon (mjeon@gsi-net.com) •Report copies to be sent to Miae Jeon, mjeon@gsi-net.com, Pat Galvin, pegalvin@gsi-net.com, and rdortres@gsi-net.com.			

Code Status Date Shipped Via Tracking # # of Coolers Prepared By

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 893261
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944 exp 9-30-2020

Flags Legend:

J - Analyte is positively identified, but tentatively quantified as an estimate concentration. The analyte was either detected between MDL and MRL or did not meet any one of the required QC criteria.

LK - The associated blank spike recovery was above method acceptance limits. This target analyte was not detected in the sample.

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

R2 - RPD/RSD exceeded the laboratory acceptance limit. See case narrative.

R7 - LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202009170164 IX-1-20200917				
09/18/2020 18:57	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
		202009170165 IX-2-20200917				
09/18/2020 19:07	Perfluorohexanoic acid (PFHxA)		0.0035		ug/L	0.0020
		202009170166 IX-3-20200917				
09/18/2020 19:16	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
		202009170167 IX-4-20200917				
09/18/2020 19:26	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
		202009170169 LH-INF-20200917				
09/21/2020 22:32	Alkalinity in CaCO3 units		200		mg/L	2.0
10/02/2020 20:13	Arsenic Total ICAP/MS		3.2	10	ug/L	1.0
09/18/2020 14:03	Calcium Total ICAP		110		mg/L	1.0
09/17/2020 18:43	Chloride		110	250	mg/L	2.5
09/21/2020 13:56	Hexavalent chromium(Dissolved)		0.64		ug/L	0.020
09/18/2020 14:03	Magnesium Total ICAP		21		mg/L	0.10
09/17/2020 18:43	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
09/17/2020 18:43	Nitrate as NO3 (calc)		12	45	mg/L	2.2
09/18/2020 19:36	Perfluorobutanesulfonic acid (PFBS)		0.0065		ug/L	0.0020
09/18/2020 19:36	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
09/18/2020 19:36	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
09/18/2020 19:36	Perfluorononanoic acid (PFNA)		0.0027		ug/L	0.0020
09/18/2020 19:36	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
09/18/2020 19:36	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
09/18/2020 14:03	Potassium Total ICAP		4.6		mg/L	1.0
09/18/2020 14:03	Sodium Total ICAP		69		mg/L	1.0
09/17/2020 18:43	Sulfate		180	250	mg/L	2.5
09/23/2020 01:38	Total Dissolved Solids (TDS)		670	500	mg/L	10
09/18/2020 15:41	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
09/17/2020 18:43	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
09/25/2020 17:16	Total Organic Carbon		0.85		mg/L	0.20
10/01/2020 13:45	Uranium by ICPMS as pCi/L		3.5		pCi/L	0.70
09/30/2020 18:14	Uranium ICAP/MS		5.2	30	ug/L	1.0
		202009170171 GAC-5-20200917				
09/18/2020 19:56	Perfluorobutanesulfonic acid (PFBS)		0.0045		ug/L	0.0020
09/18/2020 19:56	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
09/18/2020 19:56	Perfluorooctanoic acid (PFOA)		0.0029		ug/L	0.0020
	202009170172	<u>GAC-6-20200917</u>				
09/18/2020 20:07	Perfluorobutanesulfonic acid (PFBS)		0.0023		ug/L	0.0020
	202009170173	<u>GAC-7-20200917</u>				
09/18/2020 20:17	Perfluorobutanesulfonic acid (PFBS)		0.0051		ug/L	0.0020
09/18/2020 20:17	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
	202009170175	<u>IX-5-20200917</u>				
09/18/2020 20:36	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
	202009170176	<u>IX-6-20200917</u>				
09/18/2020 20:45	Perfluorohexanoic acid (PFHxA)		0.0052		ug/L	0.0020
	202009170177	<u>IX-7-20200917</u>				
09/18/2020 20:55	Perfluoroheptanoic acid (PFHpA)		0.0025		ug/L	0.0020
09/18/2020 20:55	Perfluorohexanoic acid (PFHxA)		0.0057		ug/L	0.0020
	202009170178	<u>IX-8-20200917</u>				
09/18/2020 21:04	Perfluorohexanoic acid (PFHxA)		0.0056		ug/L	0.0020
	202009170179	<u>MB-INF-20200917</u>				
09/21/2020 20:15	Alkalinity in CaCO3 units		160		mg/L	2.0
09/25/2020 15:57	Arsenic Total ICAP/MS		1.7	10	ug/L	1.0
09/18/2020 14:21	Calcium Total ICAP		61		mg/L	1.0
09/17/2020 18:30	Chloride		51	250	mg/L	2.5
09/21/2020 15:35	Hexavalent chromium(Dissolved)		0.44		ug/L	0.020
09/18/2020 14:21	Magnesium Total ICAP		12		mg/L	0.10
09/17/2020 18:30	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
09/17/2020 18:30	Nitrate as NO3 (calc)		12	45	mg/L	2.2
09/18/2020 21:14	Perfluorobutanesulfonic acid (PFBS)		0.0098		ug/L	0.0020
09/18/2020 21:14	Perfluoroheptanoic acid (PFHpA)		0.0044		ug/L	0.0020
09/18/2020 21:14	Perfluorohexanesulfonic acid (PFHxS)		0.0068		ug/L	0.0020
09/18/2020 21:14	Perfluorohexanoic acid (PFHxA)		0.0060		ug/L	0.0020
09/18/2020 21:14	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
09/18/2020 21:14	Perfluorooctanesulfonic acid (PFOS)		0.037		ug/L	0.0020
09/18/2020 21:14	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
09/18/2020 14:21	Potassium Total ICAP		3.9		mg/L	1.0
09/18/2020 14:21	Sodium Total ICAP		51		mg/L	1.0
09/17/2020 18:30	Sulfate		77	250	mg/L	2.5

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
09/23/2020 01:39	Total Dissolved Solids (TDS)		400	500	mg/L	10
09/18/2020 15:31	Total Hardness as CaCO3 by ICP (calc)		200		mg/L	3.0
09/17/2020 18:30	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
09/25/2020 17:32	Total Organic Carbon		0.95		mg/L	0.20
09/25/2020 17:48	Uranium by ICPMS as pCi/L		1.5		pCi/L	0.70
09/25/2020 15:57	Uranium ICAP/MS		2.2	30	ug/L	1.0
		202009170180	<u>MB-INF-DUP-20200917</u>			
09/18/2020 21:24	Perfluorobutanesulfonic acid (PFBS)		0.0098		ug/L	0.0020
09/18/2020 21:24	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
09/18/2020 21:24	Perfluorohexanesulfonic acid (PFHxS)		0.0068		ug/L	0.0020
09/18/2020 21:24	Perfluorohexanoic acid (PFHxA)		0.0061		ug/L	0.0020
09/18/2020 21:24	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
09/18/2020 21:24	Perfluorooctanesulfonic acid (PFOS)		0.037		ug/L	0.0020
09/18/2020 21:24	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020

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Report: 893261
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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20200917 (202009170160)					Sampled on 09/17/2020 0803				
EPA 537.1 - EPA Method 537.1									
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	13C2-PFDA	97	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	13C2-PFHxA	108	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	99	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	90	%		1
09/18/20	09/18/20 17:50	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	104	%		1

GAC-2-20200917 (202009170161)					Sampled on 09/17/2020 0806				
EPA 537.1 - EPA Method 537.1									
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	13C2-PFDA	100	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	13C2-PFHxA	107	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	99	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	91	%		1
09/18/20	09/18/20 18:09	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	106	%		1

GAC-3-20200917 (202009170162)

Sampled on 09/17/2020 0809

EPA 537.1 - EPA Method 537.1

09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	13C2-PFDA	99	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	13C2-PFHxA	108	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	96	%		1
09/18/20	09/18/20 18:38	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	104	%		1

GAC-4-20200917 (202009170163)

Sampled on 09/17/2020 0812

EPA 537.1 - EPA Method 537.1

09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	13C2-PFDA	101	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	13C2-PFHxA	103	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	98	%		1
09/18/20	09/18/20 18:48	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-1-20200917 (202009170164)

Sampled on 09/17/2020 0815

EPA 537.1 - EPA Method 537.1

09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	13C2-PFDA	102	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	13C2-PFHxA	107	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	100	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	100	%		1
09/18/20	09/18/20 18:57	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	102	%		1

IX-2-20200917 (202009170165)

Sampled on 09/17/2020 0818

EPA 537.1 - EPA Method 537.1

09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	13C2-PFDA	99	%		1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	13C2-PFHxA	106	%		1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	96	%		1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	100	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 19:07	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	101	%		1
IX-3-20200917 (202009170166)					Sampled on 09/17/2020 0821				
EPA 537.1 - EPA Method 537.1									
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	13C2-PFDA	99	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	13C2-PFHxA	106	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	100	%		1
09/18/20	09/18/20 19:16	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	100	%		1

IX-4-20200917 (202009170167)					Sampled on 09/17/2020 0824				
EPA 537.1 - EPA Method 537.1									
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Tel: (626) 386-1100
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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	13C2-PFDA	98	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	13C2-PFHxA	105	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	100	%		1
09/18/20	09/18/20 19:26	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	102	%		1

LH-INF-20200917 (202009170169)

Sampled on 09/17/2020 0827

EPA 200.8 - ICPMS Metals

10/02/20 20:13	1275497	1278449	(EPA 200.8)	Arsenic Total ICAP/MS	3.2	ug/L	1.0	1
09/30/20 18:14	1275497	1277546	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
09/30/20 18:14	1275497	1277546	(EPA 200.8)	Uranium ICAP/MS	5.2	ug/L	1.0	1

EPA 200.7 - ICP Metals

09/18/20 14:03	1275497	1275504	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
09/18/20 14:03	1275497	1275504	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
09/18/20 14:03	1275497	1275504	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
09/18/20 14:03	1275497	1275504	(EPA 200.7)	Potassium Total ICAP	4.6	mg/L	1.0	1
09/18/20 14:03	1275497	1275504	(EPA 200.7)	Sodium Total ICAP	69	mg/L	1.0	1

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
SM 5310C - Total Organic Carbon									
	09/25/20 17:16		1277083	(SM 5310C)	Total Organic Carbon	0.85	mg/L	0.20	1
EPA 200.8 - Uranium by ICPMS as pCi/L									
	10/01/20 13:45			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.5 (c)	pCi/L	0.70	1
SM 2340B - Total Hardness as CaCO3 by ICP									
	09/18/20 15:41			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
	09/21/20 13:56		1276064	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.64	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	09/17/20 18:43		1275385	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5
	09/17/20 18:43		1275385	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
	09/17/20 18:43		1275385	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	09/17/20 18:43		1275385	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	09/17/20 18:43		1275443	(EPA 300.0)	Chloride	110	mg/L	2.5	5
	09/17/20 18:43		1275443	(EPA 300.0)	Sulfate	180	mg/L	2.5	5
EPA 314.0 - Perchlorate									
	09/22/20 15:02	(1)	1275914	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0065	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0027	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

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 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
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Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	13C2-PFDA	97	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	13C2-PFHxA	103	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	93	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	97	%		1
09/18/20	09/18/20 19:36	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	103	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	09/23/20 06:55			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.97	1
EPA 524.2 - Volatile Organics by GCMS									
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1,1-Trichloroethane	ND (R7)	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Bromochloromethane	ND (LK,LM)	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1

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Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Carbon disulfide	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Carbon Tetrachloride	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Chlorobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Chlorodibromomethane	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Chloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Chloroform (Trichloromethane)	ND (LK,R2)	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) cis-1,3-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Dibromomethane	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Dichlorodifluoromethane	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Dichloromethane	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Di-isopropyl ether	ND	ug/L	3.0	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Ethyl benzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Hexachlorobutadiene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Isopropylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) m,p-Xylenes	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Naphthalene	ND (LM)	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) n-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) n-Propylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) o-Chlorotoluene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) o-Xylene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) p-Chlorotoluene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) p-Isopropyltoluene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) sec-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Styrene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) tert-amyl Methyl Ether	ND	ug/L	3.0	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) tert-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Toluene	ND	ug/L	0.50	1
09/21/20	09/22/20	5:56	1276121	1276124	(EPA 524.2) Total 1,3-Dichloropropene	ND	ug/L	0.50	1

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Tel: (626) 386-1100
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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	1,2-Dichloroethane-d4	103	%		1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	4-Bromofluorobenzene	104	%		1
09/21/20	09/22/20 5:56	1276121	1276124	(EPA 524.2)	Toluene-d8	100	%		1
SM 2320B - Alkalinity in CaCO3 units									
	09/21/20 22:32		1276180	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
09/22/20	09/23/20 01:38	1276376	1276382	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	670	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	09/21/20 22:45		1276091	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
GAC-5-20200917 (202009170171)					Sampled on 09/17/2020 1003				
EPA 537.1 - EPA Method 537.1									
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0045	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0029	ug/L	0.0020	1

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	13C2-PFDA	98	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	13C2-PFHxA	102	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	92	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	93	%		1
09/18/20	09/18/20 19:56	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	104	%		1

GAC-6-20200917 (202009170172)

Sampled on 09/17/2020 1006

EPA 537.1 - EPA Method 537.1

09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0023	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	13C2-PFDA	97	%		1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	13C2-PFHxA	103	%		1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	95	%		1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	98	%		1
09/18/20	09/18/20 20:07	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	99	%		1

GAC-7-20200917 (202009170173)

Sampled on 09/17/2020 1009

EPA 537.1 - EPA Method 537.1

09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0051	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	13C2-PFDA	99	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	13C2-PFHxA	102	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	94	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	97	%		1
09/18/20	09/18/20 20:17	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	102	%		1

GAC-8-20200917 (202009170174)

Sampled on 09/17/2020 1012

EPA 537.1 - EPA Method 537.1

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	13C2-PFDA	98	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	13C2-PFHxA	105	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	98	%		1
09/18/20	09/18/20 20:26	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	99	%		1

IX-5-20200917 (202009170175)

Sampled on 09/17/2020 1015

EPA 537.1 - EPA Method 537.1

09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	13C2-PFDA	98	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	13C2-PFHxA	102	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	94	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	97	%		1
09/18/20	09/18/20 20:36	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-6-20200917 (202009170176)

Sampled on 09/17/2020 1018

EPA 537.1 - EPA Method 537.1

09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0052	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	13C2-PFDA	97	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	13C2-PFHxA	103	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	94	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	96	%		1
09/18/20	09/18/20 20:45	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	103	%		1

IX-7-20200917 (202009170177)

Sampled on 09/17/2020 1021

EPA 537.1 - EPA Method 537.1

09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0025	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	13C2-PFDA	94	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	13C2-PFHxA	106	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	98	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	97	%		1
09/18/20	09/18/20 20:55	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	101	%		1

IX-8-20200917 (202009170178)

Sampled on 09/17/2020 1024

EPA 537.1 - EPA Method 537.1

09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0056	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	13C2-PFDA	99	%		1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	13C2-PFHxA	108	%		1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	100	%		1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	99	%		1
09/18/20	09/18/20 21:04	1275482	1275979	(EPA 537.1)	d5-NEtFOSAA	102	%		1

MB-INF-20200917 (202009170179)

Sampled on 09/17/2020 1027

EPA 200.8 - ICPMS Metals

09/18/20	09/25/20 15:57	1275497	1276357	(EPA 200.8)	Arsenic Total ICAP/MS	1.7	ug/L	1.0	1
09/18/20	09/25/20 15:57	1275497	1276357	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
09/18/20	09/25/20 15:57	1275497	1276357	(EPA 200.8)	Uranium ICAP/MS	2.2	ug/L	1.0	1

EPA 200.7 - ICP Metals

09/18/20	09/18/20 14:21	1275497	1275505	(EPA 200.7)	Calcium Total ICAP	61	mg/L	1.0	1
09/18/20	09/18/20 14:21	1275497	1275505	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
09/18/20	09/18/20 14:21	1275497	1275505	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1
09/18/20	09/18/20 14:21	1275497	1275505	(EPA 200.7)	Potassium Total ICAP	3.9	mg/L	1.0	1
09/18/20	09/18/20 14:21	1275497	1275505	(EPA 200.7)	Sodium Total ICAP	51	mg/L	1.0	1

SM 5310C - Total Organic Carbon

09/25/20	17:32		1277083	(SM 5310C)	Total Organic Carbon	0.95	mg/L	0.20	1
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EPA 200.8 - Uranium by ICPMS as pCi/L

09/25/20	17:48			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.5 (c)	pCi/L	0.70	1
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SM 2340B - Total Hardness as CaCO3 by ICP

09/18/20	15:31			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	200 (c)	mg/L	3.0	1
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EPA 218.6 - Hexavalent chromium(Dissolved)

09/21/20	15:35		1276064	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.44	ug/L	0.020	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

09/17/20	18:30		1275385	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5
09/17/20	18:30		1275385	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
09/17/20	18:30		1275385	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
09/17/20	18:30		1275385	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1

EPA 300.0 - Chloride, Sulfate by EPA 300.0

09/17/20	18:30		1275443	(EPA 300.0)	Chloride	51	mg/L	2.5	5
09/17/20	18:30		1275443	(EPA 300.0)	Sulfate	77	mg/L	2.5	5

EPA 314.0 - Perchlorate

09/22/20	15:27	(1)	1275914	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
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EPA 537.1 - EPA Method 537.1

09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
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Rounding on totals after summation.
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Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0098	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0044	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0068	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0060	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.037	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	13C2-PFDA	95	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	13C2-PFHxA	104	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	96	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	98	%		1
09/18/20	09/18/20 21:14	1275482	1275979	(EPA 537.1)	d5-NetFOSAA	98	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	09/23/20 06:55			(EPA 1664)	Oil and Grease by 1664(subbed)	ND (J)	mg/L	0.96	1
EPA 524.2 - Volatile Organics by GCMS									
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1,1-Trichloroethane	ND (R7)	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1

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Tel: (626) 386-1100
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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromochloromethane	ND (LK,LM)	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Chloroform (Trichloromethane)	ND (LK,R2)	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Naphthalene	ND (LM)	ug/L	0.50	1

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	1,2-Dichloroethane-d4	96	%		1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	4-Bromofluorobenzene	105	%		1
09/21/20	09/22/20 1:49	1276121	1276124	(EPA 524.2)	Toluene-d8	99	%		1
SM 2320B - Alkalinity in CaCO3 units									
	09/21/20 20:15		1276180	(SM 2320B)	Alkalinity in CaCO3 units	160	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
09/22/20	09/23/20 01:39	1276376	1276382	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	400	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	09/21/20 22:43		1276091	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
MB-INF-DUP-20200917 (202009170180)									
EPA 537.1 - EPA Method 537.1									
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1

Sampled on 09/17/2020 1030

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Water Replenishment District
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 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0098	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0068	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0061	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.037	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	13C2-PFDA	97	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	13C2-PFHxA	101	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	13C3-HFPO-DA	97	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	d3-NMeFOSAA	98	%		1
09/18/20	09/18/20 21:24	1275482	1275979	(EPA 537.1)	d5-NetFOSAA	99	%		1

FB - 20200917 - HOLD (202009170181)

Sampled on 09/17/2020 1033

EPA 537.1 - EPA Method 537.1

09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

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Samples Received on:
 09/17/2020 1302

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	13C2-PFDA	120	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	13C2-PFHxA	122	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	13C3-HFPO-DA	114	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	d3-NMeFOSAA	116	%		1
09/22/20	09/23/20 18:46	1276326	1276824	(EPA 537.1)	d5-NEtFOSAA	116	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1275385

202009170169 LH-INF-20200917
 202009170179 MB-INF-20200917

Analysis Date: 09/17/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1275443

202009170169 LH-INF-20200917
 202009170179 MB-INF-20200917

Analysis Date: 09/17/2020

Analyzed by: HL7J
 Analyzed by: HL7J

ICP Metals

Prep Batch: 1275497 Analytical Batch: 1275504

202009170169 LH-INF-20200917

Analysis Date: 09/18/2020

Analyzed by: NINA

ICP Metals

Prep Batch: 1275497 Analytical Batch: 1275505

202009170179 MB-INF-20200917

Analysis Date: 09/18/2020

Analyzed by: NINA

Perchlorate

Analytical Batch: 1275914

202009170169 LH-INF-20200917
 202009170179 MB-INF-20200917

Analysis Date: 09/22/2020

Analyzed by: H5VG
 Analyzed by: H5VG

EPA Method 537.1

Prep Batch: 1275482 Analytical Batch: 1275979

202009170160 GAC-1-20200917
 202009170161 GAC-2-20200917
 202009170162 GAC-3-20200917
 202009170163 GAC-4-20200917
 202009170164 IX-1-20200917
 202009170165 IX-2-20200917
 202009170166 IX-3-20200917
 202009170167 IX-4-20200917
 202009170169 LH-INF-20200917
 202009170171 GAC-5-20200917
 202009170172 GAC-6-20200917
 202009170173 GAC-7-20200917
 202009170174 GAC-8-20200917
 202009170175 IX-5-20200917
 202009170176 IX-6-20200917
 202009170177 IX-7-20200917
 202009170178 IX-8-20200917
 202009170179 MB-INF-20200917
 202009170180 MB-INF-DUP-20200917

Analysis Date: 09/18/2020

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
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 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

Hexavalent chromium(Dissolved)

Analytical Batch: 1276064

202009170169 LH-INF-20200917
 202009170179 MB-INF-20200917

Analysis Date: 09/21/2020

Analyzed by: TLH
 Analyzed by: TLH

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Report: 893261
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

Total Suspended Solids (TSS)

Analytical Batch: 1276091

202009170169 LH-INF-20200917
 202009170179 MB-INF-20200917

Analysis Date: 09/21/2020

Analyzed by: TJ52
 Analyzed by: TJ52

Volatile Organics by GCMS

Prep Batch: 1276121 Analytical Batch: 1276124

202009170169 LH-INF-20200917
 202009170179 MB-INF-20200917

Analysis Date: 09/22/2020

Analyzed by: TG9W
 Analyzed by: TG9W

Alkalinity in CaCO3 units

Analytical Batch: 1276180

202009170169 LH-INF-20200917
 202009170179 MB-INF-20200917

Analysis Date: 09/21/2020

Analyzed by: ZS6I
 Analyzed by: ZS6I

ICPMS Metals

Prep Batch: 1275497 Analytical Batch: 1276357

202009170179 MB-INF-20200917

Analysis Date: 09/25/2020

Analyzed by: DHX7

Total Dissolved Solids (TDS)

Prep Batch: 1276376 Analytical Batch: 1276382

202009170169 LH-INF-20200917
 202009170179 MB-INF-20200917

Analysis Date: 09/23/2020

Analyzed by: TJ52
 Analyzed by: TJ52

EPA Method 537.1

Prep Batch: 1276326 Analytical Batch: 1276824

202009170181 FB - 20200917 - HOLD

Analysis Date: 09/23/2020

Analyzed by: KAM

Total Organic Carbon

Analytical Batch: 1277083

202009170169 LH-INF-20200917
 202009170179 MB-INF-20200917

Analysis Date: 09/25/2020

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

ICPMS Metals

Prep Batch: 1275497 Analytical Batch: 1277546

202009170169 LH-INF-20200917

Analysis Date: 09/30/2020

Analyzed by: AZS

ICPMS Metals

Prep Batch: 1275497 Analytical Batch: 1278449

202009170169 LH-INF-20200917

Analysis Date: 10/02/2020

Analyzed by: DHX7

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1275385					Analysis Date: 09/17/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.50	mg/L	100	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.50	mg/L	100	(90-110)	20	0.40
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0452	mg/L	90	(50-150)		
MS_202009160695	Nitrate as Nitrogen by IC	ND	6.5	6.66	mg/L	107	(80-120)		
MS_202009180026	Nitrate as Nitrogen by IC	ND	6.5	6.78	mg/L	106	(80-120)		
MSD_202009160695	Nitrate as Nitrogen by IC	ND	6.5	6.67	mg/L	107	(80-120)	20	0.090
MSD_202009180026	Nitrate as Nitrogen by IC	ND	6.5	6.82	mg/L	107	(80-120)	20	0.66
LCS1	Nitrite Nitrogen by IC		1	0.957	mg/L	96	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.954	mg/L	95	(90-110)	20	0.31
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0436	mg/L	87	(50-150)		
MS_202009160695	Nitrite Nitrogen by IC	ND	2.5	1.75	mg/L	70	(80-120)		
MS_202009180026	Nitrite Nitrogen by IC	ND	2.5	1.72	mg/L	69	(80-120)		
MSD_202009160695	Nitrite Nitrogen by IC	ND	2.5	1.75	mg/L	70	(80-120)	20	0.097
MSD_202009180026	Nitrite Nitrogen by IC	ND	2.5	1.73	mg/L	69	(80-120)	20	0.87
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1275443					Analysis Date: 09/17/2020				
LCS1	Chloride		25	26.1	mg/L	105	(90-110)		
LCS2	Chloride		25	26.1	mg/L	104	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.469	mg/L	94	(50-150)		
MS_202009160695	Chloride	330	130	ND	mg/L	81	(80-120)		
MS_202009180026	Chloride	320	130	ND	mg/L	82	(80-120)		
MSD_202009160695	Chloride	330	130	ND	mg/L	80	(80-120)	20	0.14
MSD_202009180026	Chloride	320	130	ND	mg/L	81	(80-120)	20	0.23
LCS1	Sulfate		50	51.4	mg/L	103	(90-110)		
LCS2	Sulfate		50	51.4	mg/L	103	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.992	mg/L	99	(50-150)		
MRLW	Sulfate		0.25	0.237	mg/L	95	(50-150)		
MS_202009160695	Sulfate	2.4	50	141	mg/L	111	(80-120)		
MS_202009180026	Sulfate	78	125	217	mg/L	111	(80-120)		
MSD_202009160695	Sulfate	2.4	50	141	mg/L	111	(80-120)	20	0.20

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202009180026	Sulfate	78	125	217	mg/L	112	(80-120)	20	0.045

ICP Metals by EPA 200.7

Analytical Batch: 1275504

Analysis Date: 09/18/2020

LCS1	Calcium Total ICAP		50	50.0	mg/L	100	(85-115)		
LCS2	Calcium Total ICAP		50	51.7	mg/L	103	(85-115)	20	3.3
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.968	mg/L	97	(50-150)		
MS_202009170184	Calcium Total ICAP	ND	50	51.0	mg/L	102	(70-130)		
MS2_202009170137	Calcium Total ICAP	2.2	50	51.9	mg/L	99	(70-130)		
MSD_202009170184	Calcium Total ICAP	ND	50	48.4	mg/L	97	(70-130)	20	5.2
MSD2_202009170137	Calcium Total ICAP	2.2	50	51.4	mg/L	99	(70-130)	20	0.94
LCS1	Iron Total ICAP		5	4.97	mg/L	99	(85-115)		
LCS2	Iron Total ICAP		5	5.14	mg/L	103	(85-115)	20	3.4
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0195	mg/L	98	(50-150)		
MS_202009170184	Iron Total ICAP	ND	5	5.08	mg/L	102	(70-130)		
MS2_202009170137	Iron Total ICAP	0.13	5	5.05	mg/L	98	(70-130)		
MSD_202009170184	Iron Total ICAP	ND	5	4.80	mg/L	96	(70-130)	20	5.7
MSD2_202009170137	Iron Total ICAP	0.13	5	5.03	mg/L	98	(70-130)	20	0.46
LCS1	Magnesium Total ICAP		20	19.6	mg/L	98	(85-115)		
LCS2	Magnesium Total ICAP		20	20.3	mg/L	102	(85-115)	20	3.5
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0915	mg/L	92	(50-150)		
MS_202009170184	Magnesium Total ICAP	ND	20	20.3	mg/L	102	(70-130)		
MS2_202009170137	Magnesium Total ICAP	0.80	20	20.5	mg/L	99	(70-130)		
MSD_202009170184	Magnesium Total ICAP	ND	20	19.2	mg/L	96	(70-130)	20	5.3
MSD2_202009170137	Magnesium Total ICAP	0.80	20	20.5	mg/L	98	(70-130)	20	0.18
LCS1	Potassium Total ICAP		20	19.6	mg/L	98	(85-115)		
LCS2	Potassium Total ICAP		20	20.4	mg/L	102	(85-115)	20	4.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.707	mg/L	71	(50-150)		
MS_202009170184	Potassium Total ICAP	ND	20	20.5	mg/L	102	(70-130)		
MS2_202009170137	Potassium Total ICAP	ND	20	20.3	mg/L	101	(70-130)		
MSD_202009170184	Potassium Total ICAP	ND	20	19.5	mg/L	98	(70-130)	20	5.0
MSD2_202009170137	Potassium Total ICAP	ND	20	20.3	mg/L	101	(70-130)	20	0.16
LCS1	Sodium Total ICAP		50	49.0	mg/L	98	(85-115)		
LCS2	Sodium Total ICAP		50	51.0	mg/L	102	(85-115)	20	4.0

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.834	mg/L	83	(50-150)		
MS_202009170184	Sodium Total ICAP	ND	50	50.6	mg/L	101	(70-130)		
MS2_202009170137	Sodium Total ICAP	3.4	50	51.9	mg/L	97	(70-130)		
MSD_202009170184	Sodium Total ICAP	ND	50	47.9	mg/L	96	(70-130)	20	5.4
MSD2_202009170137	Sodium Total ICAP	3.4	50	51.8	mg/L	97	(70-130)	20	0.028

ICP Metals by EPA 200.7

Analytical Batch: 1275505

Analysis Date: 09/18/2020

LCS1	Calcium Total ICAP		50	50.6	mg/L	101	(85-115)		
LCS2	Calcium Total ICAP		50	50.5	mg/L	101	(85-115)	20	0.20
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.987	mg/L	99	(50-150)		
MS_202009170458	Calcium Total ICAP	15	50	63.2	mg/L	96	(70-130)		
MS2_202009170547	Calcium Total ICAP	40	50	87.5	mg/L	95	(70-130)		
MSD_202009170458	Calcium Total ICAP	15	50	63.1	mg/L	96	(70-130)	20	0.20
MSD2_202009170547	Calcium Total ICAP	40	50	88.1	mg/L	96	(70-130)	20	0.64
LCS1	Iron Total ICAP		5	5.05	mg/L	101	(85-115)		
LCS2	Iron Total ICAP		5	5.05	mg/L	101	(85-115)	20	0.0
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0201	mg/L	100	(50-150)		
MS_202009170458	Iron Total ICAP	ND	5	4.88	mg/L	98	(70-130)		
MS2_202009170547	Iron Total ICAP	ND	5	4.96	mg/L	99	(70-130)		
MSD_202009170458	Iron Total ICAP	ND	5	4.88	mg/L	98	(70-130)	20	0.28
MSD2_202009170547	Iron Total ICAP	ND	5	5.04	mg/L	101	(70-130)	20	1.7
LCS1	Magnesium Total ICAP		20	20.0	mg/L	100	(85-115)		
LCS2	Magnesium Total ICAP		20	20.0	mg/L	100	(85-115)	20	0.0
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0940	mg/L	94	(50-150)		
MS_202009170458	Magnesium Total ICAP	0.45	20	19.9	mg/L	97	(70-130)		
MS2_202009170547	Magnesium Total ICAP	15	20	34.7	mg/L	97	(70-130)		
MSD_202009170458	Magnesium Total ICAP	0.45	20	20.0	mg/L	98	(70-130)	20	0.37
MSD2_202009170547	Magnesium Total ICAP	15	20	35.0	mg/L	99	(70-130)	20	0.87
LCS1	Potassium Total ICAP		20	20.1	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	20.2	mg/L	101	(85-115)	20	0.50
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.708	mg/L	71	(50-150)		
MS_202009170458	Potassium Total ICAP	2.5	20	22.9	mg/L	102	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 893261
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202009170547	Potassium Total ICAP	7.8	20	28.7	mg/L	104	(70-130)		
MSD_202009170458	Potassium Total ICAP	2.5	20	23.1	mg/L	103	(70-130)	20	0.67
MSD2_202009170547	Potassium Total ICAP	7.8	20	29.1	mg/L	106	(70-130)	20	1.5
LCS1	Sodium Total ICAP		50	50.0	mg/L	100	(85-115)		
LCS2	Sodium Total ICAP		50	50.0	mg/L	100	(85-115)	20	0.0
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.905	mg/L	91	(50-150)		
MS_202009170458	Sodium Total ICAP	39	50	84.3	mg/L	90	(70-130)		
MS2_202009170547	Sodium Total ICAP	70	50	113	mg/L	86	(70-130)		
MSD_202009170458	Sodium Total ICAP	39	50	84.6	mg/L	91	(70-130)	20	0.35
MSD2_202009170547	Sodium Total ICAP	70	50	114	mg/L	88	(70-130)	20	0.54

Perchlorate by EPA 314.0

Analytical Batch: 1275914

Analysis Date: 09/22/2020

LCS1	Perchlorate		25	28.1	ug/L	112	(85-115)		
LCS2	Perchlorate		25	27.9	ug/L	112	(85-115)	15	0.71
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	4.87	ug/L	122	(75-125)		
MS_202009170651	Perchlorate	ND	25	22.9	ug/L	92	(80-120)		
MSD_202009170651	Perchlorate	ND	25	23.6	ug/L	94	(80-120)	15	3.0

EPA Method 537.1 by EPA 537.1

Prep Batch: 1275482 Analytical Batch: 1275979

Analysis Date: 09/18/2020

DUP_202009170161	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0266	ug/L	113	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0267	ug/L	114	(70-130)	30	0.38
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00207	ug/L	110	(50-150)		
MS2_202009170160	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0505	ug/L	107	(70-130)		
DUP_202009170161	13C2-PFDA (S)			95.7	%	96	(70-130)		
LCS1	13C2-PFDA (S)		100	95.7	%	96	(70-130)		
LCS2	13C2-PFDA (S)		100	97.0	%	97	(70-130)		
MBLK	13C2-PFDA (S)			92.6	%	93	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	92.7	%	93	(70-130)		
MS2_202009170160	13C2-PFDA (S)		100	96.2	%	96	(70-130)		
DUP_202009170161	13C2-PFHxA (S)			102	%	102	(70-130)		
LCS1	13C2-PFHxA (S)		100	104	%	104	(70-130)		
LCS2	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MS2_202009170160	13C2-PFHxA (S)		100	106	%	106	(70-130)		
DUP_202009170161	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	99.0	%	99	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	98.1	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MS2_202009170160	13C2-PFOA- IS#1 (I)		100	98.8	%	99	(50-150)		
DUP_202009170161	13C3-HFPO-DA (S)			94.9	%	95	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	99.4	%	99	(70-130)		
MBLK	13C3-HFPO-DA (S)			96.2	%	96	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	92.6	%	93	(70-130)		
MS2_202009170160	13C3-HFPO-DA (S)		100	98.8	%	99	(70-130)		
DUP_202009170161	13C4-PFOS- IS#2 (I)			97.3	%	97	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	95.0	%	95	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	98.6	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			95.0	%	95	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	95.9	%	96	(50-150)		
MS2_202009170160	13C4-PFOS- IS#2 (I)		100	96.7	%	97	(50-150)		
DUP_202009170161	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0261	ug/L	111	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0273	ug/L	116	(70-130)	30	4.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00204	ug/L	108	(50-150)		
MS2_202009170160	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0507	ug/L	105	(70-130)		
DUP_202009170161	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0256	ug/L	110	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0253	ug/L	109	(70-130)	30	1.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00207	ug/L	111	(50-150)		
MS2_202009170160	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0495	ug/L	106	(70-130)		
DUP_202009170161	d3-NMeFOSAA (I)			93.9	%	94	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	87.5	%	88	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	89.4	%	89	(50-150)		
MBLK	d3-NMeFOSAA (I)			86.2	%	86	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	87.7	%	88	(50-150)		
MS2_202009170160	d3-NMeFOSAA (I)		100	89.7	%	90	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202009170161	d5-NEtFOSAA (S)			101	%	101	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	100	%	100	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.0	%	97	(70-130)		
MBLK	d5-NEtFOSAA (S)			95.9	%	96	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	99.8	%	100	(70-130)		
MS2_202009170160	d5-NEtFOSAA (S)		100	97.4	%	97	(70-130)		
DUP_202009170161	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0276	ug/L	111	(70-130)	30	6.3
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00200	ug/L	100	(50-150)		
MS2_202009170160	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0519	ug/L	104	(70-130)		
DUP_202009170161	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00213	ug/L	107	(50-150)		
MS2_202009170160	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0523	ug/L	105	(70-130)		
DUP_202009170161	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	106	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0272	ug/L	109	(70-130)	30	3.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS2_202009170160	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0523	ug/L	105	(70-130)		
DUP_202009170161	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0256	ug/L	116	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0251	ug/L	114	(70-130)	30	2.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00198	ug/L	112	(50-150)		
MS2_202009170160	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0476	ug/L	107	(70-130)		
DUP_202009170161	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0270	ug/L	108	(70-130)	30	2.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00209	ug/L	105	(50-150)		
MS2_202009170160	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0508	ug/L	101	(70-130)		
DUP_202009170161	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0249	ug/L	100	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0265	ug/L	106	(70-130)	30	6.2
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00196	ug/L	98	(50-150)		
MS2_202009170160	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0484	ug/L	97	(70-130)		
DUP_202009170161	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0296	ug/L	119	(70-130)	30	4.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00234	ug/L	117	(50-150)		
MS2_202009170160	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0556	ug/L	111	(70-130)		
DUP_202009170161	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0262	ug/L	115	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0255	ug/L	112	(70-130)	30	2.7
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00199	ug/L	109	(50-150)		
MS2_202009170160	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0494	ug/L	108	(70-130)		
DUP_202009170161	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0274	ug/L	109	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0290	ug/L	116	(70-130)	30	6.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00220	ug/L	110	(50-150)		
MS2_202009170160	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0545	ug/L	109	(70-130)		
DUP_202009170161	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0270	ug/L	108	(70-130)	30	1.5
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00209	ug/L	105	(50-150)		
MS2_202009170160	Perfluorononanoic acid (PFNA)	ND	0.05	0.0518	ug/L	104	(70-130)		
DUP_202009170161	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0259	ug/L	112	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0253	ug/L	109	(70-130)	30	2.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00209	ug/L	113	(50-150)		
MS2_202009170160	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0483	ug/L	104	(70-130)		
DUP_202009170161	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0277	ug/L	111	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0283	ug/L	113	(70-130)	30	2.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00223	ug/L	112	(50-150)		
MS2_202009170160	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0529	ug/L	106	(70-130)		
DUP_202009170161	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0279	ug/L	112	(70-130)	30	4.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00238	ug/L	119	(50-150)		
MS2_202009170160	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0528	ug/L	105	(70-130)		
DUP_202009170161	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0254	ug/L	102	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0268	ug/L	107	(70-130)	30	5.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00202	ug/L	101	(50-150)		
MS2_202009170160	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0509	ug/L	102	(70-130)		
DUP_202009170161	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0258	ug/L	103	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0270	ug/L	108	(70-130)	30	4.9
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00198	ug/L	99	(50-150)		
MS2_202009170160	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0496	ug/L	99	(70-130)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1276064

Analysis Date: 09/21/2020

LCS1	Hexavalent chromium(Dissolved)		2	1.98	ug/L	99	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.99	ug/L	100	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0182	ug/L	91	(50-150)		
MS_202009150913	Hexavalent chromium(Dissolved)	5.8	2	7.85	ug/L	103	(90-110)		
MS_202009170572	Hexavalent chromium(Dissolved)	0.24	2	2.32	ug/L	104	(90-110)		
MSD_202009150913	Hexavalent chromium(Dissolved)	5.8	2	7.84	ug/L	103	(90-110)	20	0.14
MSD_202009170572	Hexavalent chromium(Dissolved)	0.24	2	2.32	ug/L	104	(90-110)	20	0.25

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1276091

Analysis Date: 09/21/2020

DUP_202008120043	Total Suspended Solids (TSS)	240		222	mg/L		(0-10)	10	8.6
DUP_202008120073	Total Suspended Solids (TSS)	110		100	mg/L		(0-10)	10	9.5
LCS1	Total Suspended Solids (TSS)		175	170	mg/L	97	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	180	mg/L	103	(71-107)	20	5.7
MBLK	Total Suspended Solids (TSS)			<10	mg/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Total Suspended Solids (TSS)		10	11.0	mg/L	110	(50-150)		
Volatile Organics by GCMS by EPA 524.2									
Analytical Batch: 1276124					Analysis Date: 09/21/2020				
LCS1	1,1,1,2-Tetrachloroethane		5	5.08	ug/L	102	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.08	ug/L	102	(70-130)	20	0.0
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.660	ug/L	132	(50-150)		
LCS1	1,1,1-Trichloroethane		5	6.26	ug/L	125	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.91	ug/L	98	(70-130)	20	24
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.30	ug/L	106	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.09	ug/L	102	(70-130)	20	4.0
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.63	ug/L	93	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.87	ug/L	97	(70-130)	20	5.0
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	1,1-Dichloroethane		5	4.87	ug/L	97	(70-130)		
LCS2	1,1-Dichloroethane		5	4.84	ug/L	97	(70-130)	20	0.62
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.86	ug/L	97	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.89	ug/L	98	(70-130)	20	0.62
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,1-Dichloropropene		5	4.78	ug/L	96	(70-130)		
LCS2	1,1-Dichloropropene		5	4.45	ug/L	89	(70-130)	20	7.2
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.79	ug/L	96	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.76	ug/L	95	(70-130)	20	0.63
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.650	ug/L	130	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.01	ug/L	100	(70-130)		
LCS2	1,2,3-Trichloropropane		5	4.84	ug/L	97	(70-130)	20	3.5

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.87	ug/L	97	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.88	ug/L	98	(70-130)	20	0.21
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.580	ug/L	116	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.79	ug/L	96	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.66	ug/L	93	(70-130)	20	2.8
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,2-Dichloroethane		5	4.63	ug/L	93	(70-130)		
LCS2	1,2-Dichloroethane		5	4.88	ug/L	98	(70-130)	20	5.3
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	94.8	%	95	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	94.4	%	94	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			102	%	102	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	103	%	103	(70-130)		
MRLLLW	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
LCS1	1,2-Dichloropropane		5	4.83	ug/L	97	(70-130)		
LCS2	1,2-Dichloropropane		5	4.95	ug/L	99	(70-130)	20	2.5
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.65	ug/L	93	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.57	ug/L	91	(70-130)	20	1.7
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,3-Dichloropropane		5	4.74	ug/L	95	(70-130)		
LCS2	1,3-Dichloropropane		5	4.95	ug/L	99	(70-130)	20	4.3
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.480	ug/L	96	(50-150)		
LCS1	2,2-Dichloropropane		5	4.54	ug/L	91	(70-130)		
LCS2	2,2-Dichloropropane		5	4.49	ug/L	90	(70-130)	20	1.1
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.450	ug/L	90	(50-150)		
LCS1	2-Butanone (MEK)		50	43.2	ug/L	86	(70-130)		
LCS2	2-Butanone (MEK)		50	44.6	ug/L	89	(70-130)	20	3.2
MBLK	2-Butanone (MEK)			<5.0	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	2-Butanone (MEK)		5	4.96	ug/L	99	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	102	%	102	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	98.4	%	98	(70-130)		
MBLK	4-Bromofluorobenzene (S)			104	%	104	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	103	%	103	(70-130)		
MRLW	4-Bromofluorobenzene (S)		5	104	%	104	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	46.0	ug/L	92	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	45.7	ug/L	91	(70-130)	20	0.65
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.81	ug/L	96	(50-150)		
LCS1	Benzene		5	4.90	ug/L	98	(70-130)		
LCS2	Benzene		5	4.89	ug/L	98	(70-130)	20	0.20
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Bromobenzene		5	4.90	ug/L	98	(70-130)		
LCS2	Bromobenzene		5	5.00	ug/L	100	(70-130)	20	2.0
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	Bromochloromethane		5	7.29	ug/L	146	(70-130)		
LCS2	Bromochloromethane		5	7.31	ug/L	146	(70-130)	20	0.27
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.890	ug/L	178	(50-150)		
LCS1	Bromodichloromethane		5	4.83	ug/L	97	(70-130)		
LCS2	Bromodichloromethane		5	4.87	ug/L	97	(70-130)	20	0.83
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	Bromoethane		5	5.00	ug/L	100	(70-130)		
LCS2	Bromoethane		5	5.02	ug/L	100	(70-130)	20	0.40
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromoform		5	4.67	ug/L	93	(70-130)		
LCS2	Bromoform		5	4.87	ug/L	97	(70-130)	20	4.2
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.490	ug/L	98	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	4.67	ug/L	93	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	4.79	ug/L	96	(70-130)	20	2.5
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.670	ug/L	134	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Carbon disulfide		5	5.27	ug/L	105	(70-130)		
LCS2	Carbon disulfide		5	5.18	ug/L	104	(70-130)	20	1.7
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.470	ug/L	94	(50-150)		
LCS1	Carbon Tetrachloride		5	5.09	ug/L	102	(70-130)		
LCS2	Carbon Tetrachloride		5	4.94	ug/L	99	(70-130)	20	3.0
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.430	ug/L	86	(50-150)		
LCS1	Chlorobenzene		5	4.72	ug/L	94	(70-130)		
LCS2	Chlorobenzene		5	4.81	ug/L	96	(70-130)	20	1.9
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Chlorodibromomethane		5	4.75	ug/L	95	(70-130)		
LCS2	Chlorodibromomethane		5	4.84	ug/L	97	(70-130)	20	1.9
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.620	ug/L	124	(50-150)		
LCS1	Chloroethane		5	4.85	ug/L	97	(70-130)		
LCS2	Chloroethane		5	5.09	ug/L	102	(70-130)	20	4.8
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	6.77	ug/L	135	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.15	ug/L	103	(70-130)	20	27
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.510	ug/L	102	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	5.07	ug/L	101	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.98	ug/L	100	(70-130)	20	1.8
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.660	ug/L	132	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.63	ug/L	93	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.78	ug/L	96	(70-130)	20	3.2
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.64	ug/L	93	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.61	ug/L	92	(70-130)	20	0.65
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.670	ug/L	134	(50-150)		
LCS1	Dibromomethane		5	4.57	ug/L	91	(70-130)		
LCS2	Dibromomethane		5	4.61	ug/L	92	(70-130)	20	0.87

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.31	ug/L	86	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.48	ug/L	90	(70-130)	20	3.9
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	Dichloromethane		5	4.22	ug/L	84	(70-130)		
LCS2	Dichloromethane		5	4.40	ug/L	88	(70-130)	20	4.2
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.630	ug/L	126	(50-150)		
LCS1	Di-isopropyl ether		5	5.07	ug/L	101	(70-130)		
LCS2	Di-isopropyl ether		5	5.00	ug/L	100	(70-130)	20	1.4
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.530	ug/L	106	(50-150)		
LCS1	Ethyl benzene		5	4.85	ug/L	97	(70-130)		
LCS2	Ethyl benzene		5	4.96	ug/L	99	(70-130)	20	2.2
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Hexachlorobutadiene		5	4.88	ug/L	98	(70-130)		
LCS2	Hexachlorobutadiene		5	4.87	ug/L	97	(70-130)	20	0.21
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.590	ug/L	118	(50-150)		
LCS1	Isopropylbenzene		5	5.22	ug/L	104	(70-130)		
LCS2	Isopropylbenzene		5	5.06	ug/L	101	(70-130)	20	3.1
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	m,p-Xylenes		10	9.11	ug/L	91	(70-130)		
LCS2	m,p-Xylenes		10	9.52	ug/L	95	(70-130)	20	4.4
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.880	ug/L	88	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.470	ug/L	94	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.72	ug/L	94	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.67	ug/L	93	(70-130)	20	1.1
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.80	ug/L	96	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.84	ug/L	97	(70-130)	20	0.83
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Naphthalene		5	5.24	ug/L	105	(70-130)		
LCS2	Naphthalene		5	5.04	ug/L	101	(70-130)	20	3.9
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	1.12	ug/L	<u>224</u>	(50-150)		
LCS1	n-Butylbenzene		5	4.67	ug/L	93	(70-130)		
LCS2	n-Butylbenzene		5	4.54	ug/L	91	(70-130)	20	2.8
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	n-Propylbenzene		5	4.97	ug/L	99	(70-130)		
LCS2	n-Propylbenzene		5	4.91	ug/L	98	(70-130)	20	1.2
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	o-Chlorotoluene		5	4.84	ug/L	97	(70-130)		
LCS2	o-Chlorotoluene		5	4.77	ug/L	95	(70-130)	20	1.5
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.510	ug/L	102	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.75	ug/L	95	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.73	ug/L	95	(70-130)	20	0.42
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.510	ug/L	102	(50-150)		
LCS1	o-Xylene		5	4.59	ug/L	92	(70-130)		
LCS2	o-Xylene		5	4.82	ug/L	96	(70-130)	20	4.9
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.450	ug/L	90	(50-150)		
LCS1	p-Chlorotoluene		5	4.72	ug/L	94	(70-130)		
LCS2	p-Chlorotoluene		5	4.65	ug/L	93	(70-130)	20	1.5
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.450	ug/L	90	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.68	ug/L	94	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	4.64	ug/L	93	(70-130)	20	0.86
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.480	ug/L	96	(50-150)		
LCS1	p-Isopropyltoluene		5	4.99	ug/L	100	(70-130)		
LCS2	p-Isopropyltoluene		5	4.79	ug/L	96	(70-130)	20	4.1
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.470	ug/L	94	(50-150)		
LCS1	sec-Butylbenzene		5	5.45	ug/L	109	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	sec-Butylbenzene		5	5.36	ug/L	107	(70-130)	20	1.7
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Styrene		5	4.85	ug/L	97	(70-130)		
LCS2	Styrene		5	4.91	ug/L	98	(70-130)	20	1.2
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.420	ug/L	84	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.76	ug/L	95	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.72	ug/L	94	(70-130)	20	0.84
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.460	ug/L	92	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.00	ug/L	100	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.98	ug/L	100	(70-130)	20	0.40
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.530	ug/L	106	(50-150)		
LCS1	tert-Butylbenzene		5	4.82	ug/L	96	(70-130)		
LCS2	tert-Butylbenzene		5	5.10	ug/L	102	(70-130)	20	5.7
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.69	ug/L	94	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.81	ug/L	96	(70-130)	20	2.5
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.480	ug/L	96	(50-150)		
LCS1	Toluene		5	4.66	ug/L	93	(70-130)		
LCS2	Toluene		5	4.87	ug/L	97	(70-130)	20	4.4
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Toluene-d8 (S)		5	97.8	%	98	(70-130)		
LCS2	Toluene-d8 (S)		5	99.2	%	99	(70-130)		
MBLK	Toluene-d8 (S)			101	%	101	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	96.8	%	97	(70-130)		
MRLLLW	Toluene-d8 (S)		5	98.6	%	99	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.82	ug/L	96	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.76	ug/L	95	(70-130)	20	1.3
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.50	ug/L	90	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.59	ug/L	92	(70-130)	20	2.0

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Report: 893261
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.620	ug/L	124	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.87	ug/L	97	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.98	ug/L	100	(70-130)	20	2.2
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.500	ug/L	100	(50-150)		
LCS1	Trichlorofluoromethane		5	4.85	ug/L	97	(70-130)		
LCS2	Trichlorofluoromethane		5	4.95	ug/L	99	(70-130)	20	2.0
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.330	ug/L	66	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.44	ug/L	89	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.74	ug/L	95	(70-130)	20	6.5
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.480	ug/L	96	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.95	ug/L	99	(70-130)		
LCS2	Vinyl chloride (VC)		5	5.01	ug/L	100	(70-130)	20	1.2
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.490	ug/L	98	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.250	ug/L	100	(50-150)		

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1276180

Analysis Date: 09/21/2020

LCS1	Alkalinity in CaCO3 units		100	100	mg/L	101	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)	20	1
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.81	mg/L	91	(50-150)		
MS_202008310443	Alkalinity in CaCO3 units	5.4	100	109	mg/L	103	(80-120)		
MS_202009170066	Alkalinity in CaCO3 units	26	100	128	mg/L	103	(80-120)		
MSD_202008310443	Alkalinity in CaCO3 units	5.4	100	110	mg/L	105	(80-120)	20	1.2
MSD_202009170066	Alkalinity in CaCO3 units	26	100	128	mg/L	102	(80-120)	20	0.23

ICPMS Metals by EPA 200.8

Analytical Batch: 1276357

Analysis Date: 09/25/2020

LCS1	Arsenic Total ICAP/MS		50	52.3	ug/L	105	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	52.3	ug/L	105	(85-115)	20	0.0
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.10	ug/L	110	(50-150)		
MS_202009170179	Arsenic Total ICAP/MS	1.7	50	59.8	ug/L	116	(70-130)		
MS2_202009180213	Arsenic Total ICAP/MS	2	50	57.5	ug/L	111	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202009170179	Arsenic Total ICAP/MS	1.7	50	55.2	ug/L	107	(70-130)	20	7.9
MSD2_202009180213	Arsenic Total ICAP/MS	2	50	56.2	ug/L	108	(70-130)	20	2.3
LCS1	Manganese Total ICAP/MS		100	106	ug/L	106	(85-115)		
LCS2	Manganese Total ICAP/MS		100	103	ug/L	103	(85-115)	20	2.9
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.12	ug/L	106	(50-150)		
MS_202009170179	Manganese Total ICAP/MS	ND	100	107	ug/L	106	(70-130)		
MS2_202009180213	Manganese Total ICAP/MS	ND	100	106	ug/L	104	(70-130)		
MSD_202009170179	Manganese Total ICAP/MS	ND	100	101	ug/L	99	(70-130)	20	6.0
MSD2_202009180213	Manganese Total ICAP/MS	ND	100	102	ug/L	101	(70-130)	20	2.7
LCS1	Uranium ICAP/MS		50	53.5	ug/L	107	(85-115)		
LCS2	Uranium ICAP/MS		50	53.1	ug/L	106	(85-115)	20	0.75
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	1.05	ug/L	105	(50-150)		
MS_202009170179	Uranium ICAP/MS	2.2	50	60.2	ug/L	116	(70-130)		
MS2_202009180213	Uranium ICAP/MS	ND	50	56.7	ug/L	113	(70-130)		
MSD_202009170179	Uranium ICAP/MS	2.2	50	58.0	ug/L	112	(70-130)	20	3.5
MSD2_202009180213	Uranium ICAP/MS	ND	50	54.8	ug/L	110	(70-130)	20	3.2

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1276382

Analysis Date: 09/23/2020

DUP_202007140458	Total Dissolved Solid (TDS)	200		202	mg/L		(0-10)	10	1
DUP_202009170571	Total Dissolved Solid (TDS)	370		358	mg/L		(0-10)	10	2.8
LCS1	Total Dissolved Solid (TDS)		175	154	mg/L	88	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	600	mg/L	86	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	7.00	mg/L	70	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1276326 Analytical Batch: 1276824

Analysis Date: 09/23/2020

DUP_202009220120	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0275	ug/L	117	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0258	ug/L	109	(70-130)	30	6.4
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00216	ug/L	115	(50-150)		
MS1_202009220115	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0248	ug/L	105	(70-130)		
DUP_202009220120	13C2-PFDA (S)			116	%	116	(70-130)		
LCS1	13C2-PFDA (S)		100	118	%	119	(70-130)		
LCS2	13C2-PFDA (S)		100	120	%	120	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFDA (S)			116	%	116	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	115	%	115	(70-130)		
MS1_202009220115	13C2-PFDA (S)		100	115	%	115	(70-130)		
DUP_202009220120	13C2-PFHxA (S)			118	%	119	(70-130)		
LCS1	13C2-PFHxA (S)		100	122	%	122	(70-130)		
LCS2	13C2-PFHxA (S)		100	123	%	123	(70-130)		
MBLK	13C2-PFHxA (S)			121	%	121	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	122	%	122	(70-130)		
MS1_202009220115	13C2-PFHxA (S)		100	118	%	118	(70-130)		
DUP_202009220120	13C2-PFOA- IS#1 (I)			111	%	111	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			107	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MS1_202009220115	13C2-PFOA- IS#1 (I)		100	112	%	112	(50-150)		
DUP_202009220120	13C3-HFPO-DA (S)			108	%	108	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	115	%	115	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	116	%	116	(70-130)		
MBLK	13C3-HFPO-DA (S)			114	%	114	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	117	%	117	(70-130)		
MS1_202009220115	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
DUP_202009220120	13C4-PFOS- IS#2 (I)			105	%	105	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MS1_202009220115	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
DUP_202009220120	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0285	ug/L	120	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0280	ug/L	118	(70-130)	30	1.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00232	ug/L	123	(50-150)		
MS1_202009220115	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0256	ug/L	108	(70-130)		
DUP_202009220120	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0274	ug/L	118	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0259	ug/L	111	(70-130)	30	5.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00220	ug/L	118	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202009220115	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0245	ug/L	105	(70-130)		
DUP_202009220120	d3-NMeFOSAA (I)			118	%	118	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MBLK	d3-NMeFOSAA (I)			110	%	110	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MS1_202009220115	d3-NMeFOSAA (I)		100	116	%	116	(50-150)		
DUP_202009220120	d5-NEtFOSAA (S)			111	%	111	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	115	%	115	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	115	%	115	(70-130)		
MBLK	d5-NEtFOSAA (S)			114	%	114	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
MS1_202009220115	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
DUP_202009220120	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0287	ug/L	115	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0276	ug/L	110	(70-130)	30	3.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00230	ug/L	115	(50-150)		
MS1_202009220115	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0250	ug/L	100	(70-130)		
DUP_202009220120	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0284	ug/L	114	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0278	ug/L	111	(70-130)	30	2.1
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00240	ug/L	120	(50-150)		
MS1_202009220115	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0277	ug/L	111	(70-130)		
DUP_202009220120	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0280	ug/L	112	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0273	ug/L	109	(70-130)	30	2.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00236	ug/L	118	(50-150)		
MS1_202009220115	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0274	ug/L	110	(70-130)		
DUP_202009220120	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0265	ug/L	120	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0254	ug/L	115	(70-130)	30	4.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00216	ug/L	122	(50-150)		
MS1_202009220115	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0248	ug/L	112	(70-130)		
DUP_202009220120	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0297	ug/L	119	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0286	ug/L	114	(70-130)	30	3.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202009220115	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0287	ug/L	114	(70-130)		
DUP_202009220120	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0284	ug/L	114	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0276	ug/L	110	(70-130)	30	2.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00229	ug/L	115	(50-150)		
MS1_202009220115	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0262	ug/L	104	(70-130)		
DUP_202009220120	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0310	ug/L	124	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0301	ug/L	120	(70-130)	30	3.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00250	ug/L	125	(50-150)		
MS1_202009220115	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0290	ug/L	115	(70-130)		
DUP_202009220120	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0273	ug/L	120	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0272	ug/L	119	(70-130)	30	0.37
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00225	ug/L	124	(50-150)		
MS1_202009220115	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0255	ug/L	112	(70-130)		
DUP_202009220120	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0302	ug/L	121	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0293	ug/L	117	(70-130)	30	3.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00245	ug/L	123	(50-150)		
MS1_202009220115	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0271	ug/L	107	(70-130)		
DUP_202009220120	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0290	ug/L	116	(70-130)	30	3.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00237	ug/L	119	(50-150)		
MS1_202009220115	Perfluorononanoic acid (PFNA)	ND	0.025	0.0284	ug/L	112	(70-130)		
DUP_202009220120	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0271	ug/L	117	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0255	ug/L	110	(70-130)	30	6.1

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00226	ug/L	122	(50-150)		
MS1_202009220115	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0260	ug/L	111	(70-130)		
DUP_202009220120	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0295	ug/L	118	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0296	ug/L	118	(70-130)	30	0.34
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00260	ug/L	130	(50-150)		
MS1_202009220115	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0280	ug/L	111	(70-130)		
DUP_202009220120	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0292	ug/L	117	(70-130)	30	2.7
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00252	ug/L	126	(50-150)		
MS1_202009220115	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0251	ug/L	99	(70-130)		
DUP_202009220120	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0289	ug/L	116	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0277	ug/L	111	(70-130)	30	4.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00233	ug/L	117	(50-150)		
MS1_202009220115	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0260	ug/L	103	(70-130)		
DUP_202009220120	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0291	ug/L	117	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0276	ug/L	111	(70-130)	30	5.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00231	ug/L	116	(50-150)		
MS1_202009220115	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0268	ug/L	106	(70-130)		

Total Organic Carbon by SM 5310C

Analytical Batch: 1277083

Analysis Date: 09/25/2020

LCS1	Total Organic Carbon		5	5.23	mg/L	105	(90-110)		
LCS2	Total Organic Carbon		5	5.25	mg/L	105	(90-110)	20	0.38
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.249	mg/L	124	(50-150)		
MS_202009170565	Total Organic Carbon	0.45	4	5.01	mg/L	114	(80-120)		
MS2_202009170582	Total Organic Carbon	0.26	2	2.57	mg/L	115	(80-120)		
MSD_202009170565	Total Organic Carbon	0.45	4	5.06	mg/L	115	(80-120)	20	1.0
MSD2_202009170582	Total Organic Carbon	0.26	2	2.53	mg/L	113	(80-120)	20	1.4

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
ICPMS Metals by EPA 200.8									
Analytical Batch: 1277546					Analysis Date: 09/30/2020				
LCS1	Arsenic Total ICAP/MS		50	51.5	ug/L	103	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	52.4	ug/L	105	(85-115)	20	1.7
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.707	ug/L	71	(50-150)		
MS_202009170644	Arsenic Total ICAP/MS	ND	50	55.2	ug/L	110	(70-130)		
MS2_202009210107	Arsenic Total ICAP/MS	ND	50	51.7	ug/L	103	(70-130)		
MSD_202009170644	Arsenic Total ICAP/MS	ND	50	51.3	ug/L	102	(70-130)	20	7.4
MSD2_202009210107	Arsenic Total ICAP/MS	ND	50	50.7	ug/L	101	(70-130)	20	2.0
LCS1	Manganese Total ICAP/MS		100	103	ug/L	103	(85-115)		
LCS2	Manganese Total ICAP/MS		100	105	ug/L	105	(85-115)	20	1.9
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.06	ug/L	103	(50-150)		
MS_202009170644	Manganese Total ICAP/MS	79	100	183	ug/L	104	(70-130)		
MS2_202009210107	Manganese Total ICAP/MS	3.1	100	106	ug/L	103	(70-130)		
MSD_202009170644	Manganese Total ICAP/MS	79	100	173	ug/L	94	(70-130)	20	5.6
MSD2_202009210107	Manganese Total ICAP/MS	3.1	100	102	ug/L	100	(70-130)	20	3.2
LCS1	Uranium ICAP/MS		50	50.0	ug/L	100	(85-115)		
LCS2	Uranium ICAP/MS		50	50.5	ug/L	101	(85-115)	20	1
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	1.00	ug/L	100	(50-150)		
MS_202009170644	Uranium ICAP/MS	85	50	140	ug/L	111	(70-130)		
MS2_202009210107	Uranium ICAP/MS	5.2	50	56.1	ug/L	102	(70-130)		
MSD_202009170644	Uranium ICAP/MS	85	50	134	ug/L	99	(70-130)	20	4.6
MSD2_202009210107	Uranium ICAP/MS	5.2	50	54.4	ug/L	98	(70-130)	20	3.1

ICPMS Metals by EPA 200.8									
Analytical Batch: 1278449					Analysis Date: 10/02/2020				
LCS1	Arsenic Total ICAP/MS		50	50.3	ug/L	101	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	49.7	ug/L	100	(85-115)	20	1.2
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.34	ug/L	134	(50-150)		
MS_202010010248	Arsenic Total ICAP/MS	3.2	50	63.0	ug/L	120	(70-130)		
MS2_202009290495	Arsenic Total ICAP/MS	ND	50	61.4	ug/L	121	(70-130)		
MSD_202010010248	Arsenic Total ICAP/MS	3.2	50	63.3	ug/L	120	(70-130)	20	0.49
MSD2_202009290495	Arsenic Total ICAP/MS	ND	50	58.9	ug/L	116	(70-130)	20	4.2
LCS1	Manganese Total ICAP/MS		100	104	ug/L	104	(85-115)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 893261
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Manganese Total ICAP/MS		100	106	ug/L	106	(85-115)	20	1.9
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.06	ug/L	103	(50-150)		
MS_202010010248	Manganese Total ICAP/MS	ND	100	111	ug/L	111	(70-130)		
MS2_202009290495	Manganese Total ICAP/MS	39	100	152	ug/L	112	(70-130)		
MSD_202010010248	Manganese Total ICAP/MS	ND	100	109	ug/L	109	(70-130)	20	1.5
MSD2_202009290495	Manganese Total ICAP/MS	39	100	146	ug/L	107	(70-130)	20	3.7
LCS1	Uranium ICAP/MS		50	51.2	ug/L	102	(85-115)		
LCS2	Uranium ICAP/MS		50	52.0	ug/L	104	(85-115)	20	1.6
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	1.01	ug/L	101	(50-150)		
MS_202010010248	Uranium ICAP/MS	3.7	50	64.3	ug/L	121	(70-130)		
MS2_202009290495	Uranium ICAP/MS	ND	50	57.8	ug/L	115	(70-130)		
MSD_202010010248	Uranium ICAP/MS	3.7	50	63.6	ug/L	120	(70-130)	20	1.1
MSD2_202009290495	Uranium ICAP/MS	ND	50	56.0	ug/L	111	(70-130)	20	3.2

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/05/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 10/05/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 10/05/2020

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**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/05/2020

Quant Report - Page 1 of 1

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ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-38825-1
Client Project/Site: 893261

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
9/24/2020 9:44:39 AM

Lori Thompson, Project Manager I
(714)895-5494
Lori.Thompson@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 893261

Job ID: 570-38825-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 893261

Job ID: 570-38825-1

Job ID: 570-38825-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-38825-1

Comments

No additional comments.

Receipt

The samples were received on 9/18/2020 12:15 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.5° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS) associated with preparation batch 570-96483. LCS/LCSD was performed to meet QC requirement.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 893261

Job ID: 570-38825-1

Client Sample ID: 202009170169

Lab Sample ID: 570-38825-1

No Detections.

Client Sample ID: 202009170179

Lab Sample ID: 570-38825-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	0.865	J	0.961	0.768	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 893261

Job ID: 570-38825-1

General Chemistry

Client Sample ID: 202009170169

Date Collected: 09/17/20 08:27

Date Received: 09/18/20 12:15

Lab Sample ID: 570-38825-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.972	0.777	mg/L		09/23/20 06:55	09/23/20 06:55	1

Client Sample ID: 202009170179

Date Collected: 09/17/20 10:27

Date Received: 09/18/20 12:15

Lab Sample ID: 570-38825-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	0.865	J	0.961	0.768	mg/L		09/23/20 06:55	09/23/20 06:55	1

QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 893261

Job ID: 570-38825-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-96483/1-A
Matrix: Water
Analysis Batch: 96556

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96483

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		09/23/20 06:55	09/23/20 06:55	1

Lab Sample ID: LCS 570-96483/2-A
Matrix: Water
Analysis Batch: 96556

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96483

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.50		mg/L		94	78 - 114

Lab Sample ID: LCSD 570-96483/3-A
Matrix: Water
Analysis Batch: 96556

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96483

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.30		mg/L		93	78 - 114	1	18

Lab Sample ID: 570-38821-B-1-A MS
Matrix: Water
Analysis Batch: 96556

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 96483

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	1.04		38.1	35.94		mg/L		92	78 - 114

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 893261

Job ID: 570-38825-1

General Chemistry

Prep Batch: 96483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38825-1	202009170169	Total/NA	Water	1664A	
570-38825-2	202009170179	Total/NA	Water	1664A	
MB 570-96483/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-96483/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-96483/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
570-38821-B-1-A MS	Matrix Spike	Total/NA	Water	1664A	

Analysis Batch: 96556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-38825-1	202009170169	Total/NA	Water	1664A	96483
570-38825-2	202009170179	Total/NA	Water	1664A	96483
MB 570-96483/1-A	Method Blank	Total/NA	Water	1664A	96483
LCS 570-96483/2-A	Lab Control Sample	Total/NA	Water	1664A	96483
LCSD 570-96483/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	96483
570-38821-B-1-A MS	Matrix Spike	Total/NA	Water	1664A	96483

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 893261

Job ID: 570-38825-1

Client Sample ID: 202009170169

Lab Sample ID: 570-38825-1

Date Collected: 09/17/20 08:27

Matrix: Water

Date Received: 09/18/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1029 mL	1000 mL	96483	09/23/20 06:55	ULIN	ECL 1
Total/NA	Analysis	1664A		1			96556	09/23/20 06:55	ULIN	ECL 1

Instrument ID: NOEQUIP

Client Sample ID: 202009170179

Lab Sample ID: 570-38825-2

Date Collected: 09/17/20 10:27

Matrix: Water

Date Received: 09/18/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1041 mL	1000 mL	96483	09/23/20 06:55	ULIN	ECL 1
Total/NA	Analysis	1664A		1			96556	09/23/20 06:55	ULIN	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 893261

Job ID: 570-38825-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-29-20
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-29-20
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-20

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Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 893261

Job ID: 570-38825-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 893261

Job ID: 570-38825-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-38825-1	202009170169	Water	09/17/20 08:27	09/18/20 12:15	
570-38825-2	202009170179	Water	09/17/20 10:27	09/18/20 12:15	

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38825

Date: 9/18/2020

Submittal Form

*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder# 893261 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature.

eurofins | Eaton Analytical

Ship To:
Eurofins CalScience
7440 Lincoln Way
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 893261 Report Due: 10/01/2020

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: us20_subcontract@eurofinsus.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix.
Samples from: CALIFORNIA

Sample ID: 202009170169 Client Sample ID for reference onl LH-INF-20200917
Sample Date & Time Matrix: 09/17/20 0827 DW
PWS Systemcode: PWSID

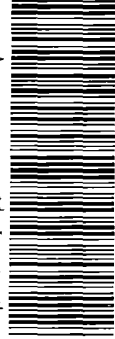
Sample type: Sample Event: Sample Point ID: Facility ID: Static ID:

Method: EPA 1664 Prep Method: Analysis Requested: Oil and Grease by 1664(subbed)

Sample ID: 202009170179 Client Sample ID for reference onl MB-INF-20200917
Sample Date & Time Matrix: 09/17/20 1027 DW
PWS Systemcode: PWSID

Sample type: Sample Event: Sample Point ID: Facility ID: Static ID:

Method: EPA 1664 Prep Method: Analysis Requested: Oil and Grease by 1664(subbed)



570-36825 Chain of Custody

Relinquished by: [Signature] Sample Control Date: 9/18/20 Time: 1215
 Received by: [Signature] Date: 9/18/2020 Time: 1215
 Relinquished by: Sample Control Date: Time:
 Received by: Sample Control Date: Time:

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

1-9/1-5 526

Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-38825-1

Login Number: 38825

List Number: 1

Creator: Le, Danny

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 894497
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 894497
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **September 24, 2020 at 1227**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202009240155</u>	GAC-1M-20200924 Static ID: 537.1 @537.1	09/24/2020 0840
<u>202009240156</u>	GAC-2M-20200924 Static ID: 537.1 @537.1	09/24/2020 0843
<u>202009240157</u>	GAC-3M-20200924 Static ID: 537.1 @537.1	09/24/2020 0846
<u>202009240158</u>	GAC-4M-20200924 Static ID: 537.1 @537.1	09/24/2020 0849
<u>202009240159</u>	IX-1M-20200924 Static ID: 537.1 @537.1	09/24/2020 0852
<u>202009240160</u>	IX-2M-20200924 Static ID: 537.1 @537.1	09/24/2020 0855
<u>202009240161</u>	IX-3M-20200924 Static ID: 537.1 @537.1	09/24/2020 0858
<u>202009240162</u>	IX-4M-20200924 Static ID: 537.1 @537.1	09/24/2020 0901
<u>202009240163</u>	GAC-5M-20200924 Static ID: 537.1 @537.1	09/24/2020 1100
<u>202009240164</u>	GAC-6M-20200924 Static ID: 537.1 @537.1	09/24/2020 1103
<u>202009240165</u>	GAC-7M-20200924 Static ID: 537.1	09/24/2020 1106

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 894497
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

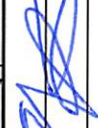
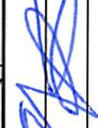




The following samples were received from you on **September 24, 2020 at 1227**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202009240166	GAC-8M-20200924 Static ID: 537.1	09/24/2020 1109
	@537.1	
202009240167	IX-5M-20200924 Static ID: 537.1	09/24/2020 1112
	@537.1	
202009240168	IX-6M-20200924 Static ID: 537.1	09/24/2020 1115
	@537.1	
202009240169	IX-7M-20200924 Static ID: 537.1	09/24/2020 1118
	@537.1	
202009240170	IX-8M-20200924 Static ID: 537.1	09/24/2020 1121
	@537.1	

Test Description

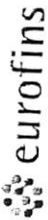
@537.1 -- EPA Method 537.1

894497

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302								
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang								
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) BC								
LABORATORY: Eurofins Eaton Analytical		REQUESTED ANALYSES Please check box or fill in blank as needed.										
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD												
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdiorres@gsi-net.com. Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1M - 20200924	9/24/20	0840	Water	2		X		X			
	GAC-2M - 20200924		0843	Water			X		X			
	GAC-3M - 20200924		0846	Water			X		X			
	GAC-4M - 20200924		0849	Water			X		X			
	IX-1M - 20200924		0852	Water			X		X			
	IX-2M - 20200924		0855	Water			X		X			
	IX-3M - 20200924		0858	Water			X		X			
	IX-4M - 20200924		0901	Water			X		X			
	LH-NF-BC			Water			X		X			
	LH-NF-DUP-BC			Water			X		X			
	GAC-5M - 20200924	9/24/20	1100	Water	2		X		X			
	GAC-6M - 20200924		1103	Water			X		X			
	GAC-7M - 20200924		1106	Water			X		X			
	GAC-8M - 20200924		1109	Water			X		X			
Relinquished by: (Signature) 						Received by: (Signature) 		Date: 9/24/20		Time: 1226		
Relinquished by: (Signature) 						Received by: (Signature) 		Date: 9/24/20		Time: 1227		
Relinquished by: (Signature) 						Received by: (Signature) 		Date: 9/24/20		Time: 1227		

294497

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot										
PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) <u>BC</u>										
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical		REQUESTED ANALYSES Please check box or fill in blank as needed.										
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD												
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	IX-5M - 20200924	9/24/20	1112	Water	2		X		X			
	IX-6M - 20200924		1115	Water		X			X			
	IX-7M - 20200924		1118	Water		X			X			
	IX-8M - 20200924		1121	Water		X			X			
	MB-INF			Water					X			
	MB-INF-DUP			Water					X			
	FB			Water					X			
Received by: (Signature) Date: <u>9/24/20</u> Time: <u>1226</u>												
Relinquished by: (Signature) _____ Date: <u>9/24/20</u> Time: <u>1227</u>												
Relinquished by: (Signature) <u>Charles Brooks</u> Date: _____ Time: _____												



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 894497

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616 (Observation = 12.1 °C) (Corr. Factor = -0.3 °C) (Final = 11.8 °C)

TYPE OF ICE: Real Synthetic No Ice

CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA and Radon Headspace:

No Samples with Headspace:

Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 615.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors):

RECEIVED BY: Chris Boeck SIGNATURE

COMPANY/TITLE: Eurofins Eaton Analytical

DATE: 9.24.20

TIME: 1227

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 894497
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202009240155 <u>GAC-1M-20200924</u>						
09/28/2020 19:16	Perfluorobutanesulfonic acid (PFBS)		0.0027		ug/L	0.0020
09/28/2020 19:16	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
09/28/2020 19:16	Perfluorooctanoic acid (PFOA)		0.0027		ug/L	0.0020
202009240157 <u>GAC-3M-20200924</u>						
09/28/2020 19:35	Perfluorobutanesulfonic acid (PFBS)		0.0047		ug/L	0.0020
09/28/2020 19:35	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
09/28/2020 19:35	Perfluorooctanoic acid (PFOA)		0.0026		ug/L	0.0020
202009240158 <u>GAC-4M-20200924</u>						
09/28/2020 19:45	Perfluorooctanesulfonic acid (PFOS)		0.0020		ug/L	0.0020
202009240159 <u>IX-1M-20200924</u>						
09/29/2020 04:32	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
09/29/2020 04:32	Perfluorooctanesulfonic acid (PFOS)		0.0038		ug/L	0.0020
09/29/2020 04:32	Perfluorooctanoic acid (PFOA)		0.0072		ug/L	0.0020
202009240160 <u>IX-2M-20200924</u>						
09/29/2020 04:42	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
09/29/2020 04:42	Perfluorooctanoic acid (PFOA)		0.0084		ug/L	0.0020
202009240161 <u>IX-3M-20200924</u>						
09/29/2020 04:51	Perfluorobutanesulfonic acid (PFBS)		0.0029		ug/L	0.0020
09/29/2020 04:51	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
09/29/2020 04:51	Perfluorooctanoic acid (PFOA)		0.0085		ug/L	0.0020
202009240162 <u>IX-4M-20200924</u>						
09/29/2020 05:10	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
09/29/2020 05:10	Perfluorooctanoic acid (PFOA)		0.0076		ug/L	0.0020
202009240163 <u>GAC-5M-20200924</u>						
09/29/2020 05:20	Perfluorobutanesulfonic acid (PFBS)		0.0092		ug/L	0.0020
09/29/2020 05:20	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
09/29/2020 05:20	Perfluorohexanesulfonic acid (PFHxS)		0.0032		ug/L	0.0020
09/29/2020 05:20	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
09/29/2020 05:20	Perfluorooctanesulfonic acid (PFOS)		0.010		ug/L	0.0020
09/29/2020 05:20	Perfluorooctanoic acid (PFOA)		0.0099		ug/L	0.0020
202009240164 <u>GAC-6M-20200924</u>						
09/29/2020 05:30	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
09/29/2020 05:30	Perfluoroheptanoic acid (PFHpA)		0.0038		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
09/29/2020 05:30	Perfluorohexanesulfonic acid (PFHxS)		0.0026		ug/L	0.0020
09/29/2020 05:30	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
09/29/2020 05:30	Perfluorooctanoic acid (PFOA)		0.0071		ug/L	0.0020
		202009240165 <u>GAC-7M-20200924</u>				
09/29/2020 05:39	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
09/29/2020 05:39	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
09/29/2020 05:39	Perfluorohexanesulfonic acid (PFHxS)		0.0039		ug/L	0.0020
09/29/2020 05:39	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
09/29/2020 05:39	Perfluorooctanesulfonic acid (PFOS)		0.0090		ug/L	0.0020
09/29/2020 05:39	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
		202009240166 <u>GAC-8M-20200924</u>				
09/29/2020 05:49	Perfluorobutanesulfonic acid (PFBS)		0.0066		ug/L	0.0020
09/29/2020 05:49	Perfluoroheptanoic acid (PFHpA)		0.0024		ug/L	0.0020
09/29/2020 05:49	Perfluorohexanesulfonic acid (PFHxS)		0.0021		ug/L	0.0020
09/29/2020 05:49	Perfluorohexanoic acid (PFHxA)		0.0049		ug/L	0.0020
09/29/2020 05:49	Perfluorooctanesulfonic acid (PFOS)		0.0073		ug/L	0.0020
09/29/2020 05:49	Perfluorooctanoic acid (PFOA)		0.0064		ug/L	0.0020
		202009240167 <u>IX-5M-20200924</u>				
09/29/2020 05:58	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
09/29/2020 05:58	Perfluorohexanoic acid (PFHxA)		0.0044		ug/L	0.0020
09/29/2020 05:58	Perfluorooctanoic acid (PFOA)		0.0066		ug/L	0.0020
		202009240168 <u>IX-6M-20200924</u>				
09/29/2020 06:08	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
09/29/2020 06:08	Perfluorohexanoic acid (PFHxA)		0.0050		ug/L	0.0020
09/29/2020 06:08	Perfluorooctanoic acid (PFOA)		0.0084		ug/L	0.0020
		202009240169 <u>IX-7M-20200924</u>				
09/29/2020 06:18	Perfluorobutanesulfonic acid (PFBS)		0.0037		ug/L	0.0020
09/29/2020 06:18	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
09/29/2020 06:18	Perfluorohexanoic acid (PFHxA)		0.0059		ug/L	0.0020
09/29/2020 06:18	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
		202009240170 <u>IX-8M-20200924</u>				
10/02/2020 19:55	Perfluorobutanesulfonic acid (PFBS)		0.0023		ug/L	0.0020
10/02/2020 19:55	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
10/02/2020 19:55	Perfluorohexanoic acid (PFHxA)		0.0057		ug/L	0.0020
10/02/2020 19:55	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1M-20200924 (202009240155)						Sampled on 09/24/2020 0840			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0027	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0027	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	13C2-PFDA	104	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	13C2-PFHxA	114	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	13C2-PFOA- IS#1	122	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	13C3-HFPO-DA	99	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	d3-NMeFOSAA	105	%		1
09/26/20	09/28/20 19:16	1277258	1277603	(EPA 537.1)	d5-NEtFOSAA	110	%		1

GAC-2M-20200924 (202009240156)						Sampled on 09/24/2020 0843			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	13C2-PFDA	103	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	13C2-PFHxA	112	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	13C3-HFPO-DA	99	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	d3-NMeFOSAA	108	%		1
09/26/20	09/28/20 19:26	1277258	1277603	(EPA 537.1)	d5-NEtFOSAA	105	%		1

GAC-3M-20200924 (202009240157)

Sampled on 09/24/2020 0846

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0047	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0026	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	13C2-PFDA	102	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	13C2-PFHxA	116	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	13C3-HFPO-DA	98	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	d3-NMeFOSAA	106	%		1
09/26/20	09/28/20 19:35	1277258	1277603	(EPA 537.1)	d5-NEtFOSAA	104	%		1

GAC-4M-20200924 (202009240158)

Sampled on 09/24/2020 0849

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0020	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	13C2-PFDA	107	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	13C2-PFHxA	117	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	13C3-HFPO-DA	102	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	d3-NMeFOSAA	107	%		1
09/26/20	09/28/20 19:45	1277258	1277603	(EPA 537.1)	d5-NEtFOSAA	110	%		1

IX-1M-20200924 (202009240159)

Sampled on 09/24/2020 0852

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0038	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0072	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	13C2-PFDA	112	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	13C2-PFHxA	116	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	103	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	124	%		1
09/27/20	09/29/20 04:32	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-2M-20200924 (202009240160)

Sampled on 09/24/2020 0855

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0084	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	13C2-PFDA	110	%		1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	13C2-PFHxA	114	%		1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	102	%		1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	121	%		1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 04:42	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	104	%		1
IX-3M-20200924 (202009240161)						Sampled on 09/24/2020 0858			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0029	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0085	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	13C2-PFDA	109	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	13C2-PFHxA	114	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	103	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	126	%		1
09/27/20	09/29/20 04:51	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	105	%		1

IX-4M-20200924 (202009240162)

Sampled on 09/24/2020 0901

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0076	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	13C2-PFDA	112	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	13C2-PFHxA	115	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	103	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	125	%		1
09/27/20	09/29/20 05:10	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	102	%		1

GAC-5M-20200924 (202009240163)

Sampled on 09/24/2020 1100

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0092	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0032	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.010	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0099	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	13C2-PFDA	113	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	13C2-PFHxA	115	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	101	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	127	%		1
09/27/20	09/29/20 05:20	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	106	%		1

GAC-6M-20200924 (202009240164)

Sampled on 09/24/2020 1103

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0026	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0071	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	13C2-PFDA	111	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	13C2-PFHxA	116	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	103	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	126	%		1
09/27/20	09/29/20 05:30	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	107	%		1

GAC-7M-20200924 (202009240165)

Sampled on 09/24/2020 1106

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0039	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0090	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	13C2-PFDA	109	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	13C2-PFHxA	111	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	120	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	100	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	128	%		1
09/27/20	09/29/20 05:39	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	104	%		1

GAC-8M-20200924 (202009240166)

Sampled on 09/24/2020 1109

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0066	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0024	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0021	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0049	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0073	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0064	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	13C2-PFDA	112	%		1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	13C2-PFHxA	113	%		1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	103	%		1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	127	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 05:49	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	107	%		1
IX-5M-20200924 (202009240167)						Sampled on 09/24/2020 1112			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0044	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0066	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	13C2-PFDA	119	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	13C2-PFHxA	119	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	108	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	128	%		1
09/27/20	09/29/20 05:58	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	109	%		1

IX-6M-20200924 (202009240168)

Sampled on 09/24/2020 1115

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Tel: (626) 386-1100
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Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0050	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0084	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	13C2-PFDA	112	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	13C2-PFHxA	113	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	102	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	129	%		1
09/27/20	09/29/20 06:08	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	102	%		1

IX-7M-20200924 (202009240169)

Static ID: 537.1

Sampled on 09/24/2020 1118

EPA 537.1 - EPA Method 537.1

09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

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Tel: (626) 386-1100
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Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0037	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0059	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	13C2-PFDA	115	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	13C2-PFHxA	115	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	13C3-HFPO-DA	104	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	d3-NMeFOSAA	126	%		1
09/27/20	09/29/20 06:18	1277343	1277610	(EPA 537.1)	d5-NEtFOSAA	106	%		1

IX-8M-20200924 (202009240170)

Sampled on 09/24/2020 1121

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0023	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 09/24/2020 1227

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	13C2-PFDA	111	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	13C2-PFHxA	117	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	13C3-HFPO-DA	108	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	d3-NMeFOSAA	94	%		1
09/30/20	10/02/20 19:55	1278072	1278774	(EPA 537.1)	d5-NEtFOSAA	113	%		1

Rounding on totals after summation.
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Report: 894497
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

EPA Method 537.1

Prep Batch: 1277258 Analytical Batch: 1277603

202009240155	GAC-1M-20200924
202009240156	GAC-2M-20200924
202009240157	GAC-3M-20200924
202009240158	GAC-4M-20200924

Analysis Date: 09/28/2020

Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ

EPA Method 537.1

Prep Batch: 1277343 Analytical Batch: 1277610

202009240159	IX-1M-20200924
202009240160	IX-2M-20200924
202009240161	IX-3M-20200924
202009240162	IX-4M-20200924
202009240163	GAC-5M-20200924
202009240164	GAC-6M-20200924
202009240165	GAC-7M-20200924
202009240166	GAC-8M-20200924
202009240167	IX-5M-20200924
202009240168	IX-6M-20200924
202009240169	IX-7M-20200924

Analysis Date: 09/29/2020

Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ

EPA Method 537.1

Prep Batch: 1278072 Analytical Batch: 1278774

202009240170	IX-8M-20200924
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Analysis Date: 10/02/2020

Analyzed by: Y7BM

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1277258 Analytical Batch: 1277603					Analysis Date: 09/28/2020				
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0501	ug/L	106	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0499	ug/L	106	(70-130)	30	0.20
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00198	ug/L	105	(50-150)		
MS1_202009230118	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0227	ug/L	97	(70-130)		
MSD1_202009230118	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0248	ug/L	105	(70-130)	30	8.6
LCS3	13C2-PFDA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFDA (S)		100	99.2	%	99	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.8	%	99	(70-130)		
MS1_202009230118	13C2-PFDA (S)		100	98.5	%	98	(70-130)		
MSD1_202009230118	13C2-PFDA (S)		100	108	%	109	(70-130)		
LCS3	13C2-PFHxA (S)		100	112	%	112	(70-130)		
LCS4	13C2-PFHxA (S)		100	118	%	118	(70-130)		
MBLK	13C2-PFHxA (S)			122	%	122	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	110	%	111	(70-130)		
MS1_202009230118	13C2-PFHxA (S)		100	114	%	114	(70-130)		
MSD1_202009230118	13C2-PFHxA (S)		100	126	%	126	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	114	%	115	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			119	%	119	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	124	%	124	(50-150)		
MS1_202009230118	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
MSD1_202009230118	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	98.0	%	98	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MBLK	13C3-HFPO-DA (S)			102	%	102	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	94.3	%	94	(70-130)		
MS1_202009230118	13C3-HFPO-DA (S)		100	99.1	%	99	(70-130)		
MSD1_202009230118	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			100	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS1_202009230118	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202009230118	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0504	ug/L	104	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0495	ug/L	102	(70-130)	30	1.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00205	ug/L	109	(50-150)		
MS1_202009230118	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0235	ug/L	100	(70-130)		
MSD1_202009230118	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0264	ug/L	112	(70-130)	30	12
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0492	ug/L	106	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0493	ug/L	106	(70-130)	30	0.61
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00200	ug/L	108	(50-150)		
MS1_202009230118	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0227	ug/L	97	(70-130)		
MSD1_202009230118	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0247	ug/L	106	(70-130)	30	8.5
LCS3	d3-NMeFOSAA (I)		100	99.0	%	99	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	96.7	%	97	(50-150)		
MBLK	d3-NMeFOSAA (I)			98.8	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS1_202009230118	d3-NMeFOSAA (I)		100	98.7	%	99	(50-150)		
MSD1_202009230118	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
MBLK	d5-NEtFOSAA (S)			115	%	115	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MS1_202009230118	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MSD1_202009230118	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0485	ug/L	97	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0489	ug/L	98	(70-130)	30	1.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00191	ug/L	96	(50-150)		
MS1_202009230118	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0223	ug/L	89	(70-130)		
MSD1_202009230118	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0246	ug/L	98	(70-130)	30	9.6
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0530	ug/L	106	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0529	ug/L	106	(70-130)	30	0.19
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00244	ug/L	122	(50-150)		
MS1_202009230118	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0243	ug/L	97	(70-130)		
MSD1_202009230118	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0258	ug/L	103	(70-130)	30	6.0
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0540	ug/L	108	(70-130)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 894497
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0530	ug/L	106	(70-130)	30	1.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00243	ug/L	121	(50-150)		
MS1_202009230118	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0248	ug/L	99	(70-130)		
MSD1_202009230118	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0261	ug/L	104	(70-130)	30	5.0
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0496	ug/L	112	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0506	ug/L	114	(70-130)	30	1.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00206	ug/L	116	(50-150)		
MS1_202009230118	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0228	ug/L	103	(70-130)		
MSD1_202009230118	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0253	ug/L	114	(70-130)	30	10
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0513	ug/L	103	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0481	ug/L	96	(70-130)	30	5.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202009230118	Perfluorodecanoic acid (PFDA)		0.025	0.0226	ug/L	91	(70-130)		
MSD1_202009230118	Perfluorodecanoic acid (PFDA)		0.025	0.0252	ug/L	101	(70-130)	30	11
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0503	ug/L	101	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0480	ug/L	96	(70-130)	30	4.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00195	ug/L	97	(50-150)		
MS1_202009230118	Perfluorododecanoic acid (PFDoA)		0.025	0.0224	ug/L	90	(70-130)		
MSD1_202009230118	Perfluorododecanoic acid (PFDoA)		0.025	0.0245	ug/L	98	(70-130)	30	8.9
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0566	ug/L	113	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0553	ug/L	111	(70-130)	30	3.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202009230118	Perfluoroheptanoic acid (PFHpA)		0.025	0.0260	ug/L	104	(70-130)		
MSD1_202009230118	Perfluoroheptanoic acid (PFHpA)		0.025	0.0288	ug/L	115	(70-130)	30	10
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0519	ug/L	114	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0520	ug/L	114	(70-130)	30	0.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00205	ug/L	113	(50-150)		
MS1_202009230118	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0233	ug/L	102	(70-130)		
MSD1_202009230118	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0264	ug/L	116	(70-130)	30	12
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0540	ug/L	108	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0546	ug/L	109	(70-130)	30	1.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS1_202009230118	Perfluorohexanoic acid (PFHxA)		0.025	0.0259	ug/L	104	(70-130)		
MSD1_202009230118	Perfluorohexanoic acid (PFHxA)		0.025	0.0278	ug/L	111	(70-130)	30	7.1
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0509	ug/L	102	(70-130)	30	2.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202009230118	Perfluorononanoic acid (PFNA)		0.025	0.0242	ug/L	97	(70-130)		
MSD1_202009230118	Perfluorononanoic acid (PFNA)		0.025	0.0267	ug/L	107	(70-130)	30	9.7
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0525	ug/L	113	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0514	ug/L	111	(70-130)	30	1.2
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00211	ug/L	114	(50-150)		
MS1_202009230118	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0235	ug/L	101	(70-130)		
MSD1_202009230118	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0256	ug/L	110	(70-130)	30	8.7
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0543	ug/L	109	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0524	ug/L	105	(70-130)	30	3.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00227	ug/L	114	(50-150)		
MS1_202009230118	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0248	ug/L	99	(70-130)		
MSD1_202009230118	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0276	ug/L	110	(70-130)	30	11
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0600	ug/L	120	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0509	ug/L	102	(70-130)	30	16
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202009230118	Perfluorotetradecanoic acid (PFTA)		0.025	0.0258	ug/L	103	(70-130)		
MSD1_202009230118	Perfluorotetradecanoic acid (PFTA)		0.025	0.0247	ug/L	99	(70-130)	30	4.5
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0525	ug/L	105	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0504	ug/L	101	(70-130)	30	5.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202009230118	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0229	ug/L	92	(70-130)		
MSD1_202009230118	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0255	ug/L	102	(70-130)	30	11
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0504	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0484	ug/L	97	(70-130)	30	3.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00205	ug/L	102	(50-150)		
MS1_202009230118	Perfluoroundecanoic acid (PFUnA)		0.025	0.0226	ug/L	90	(70-130)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202009230118	Perfluoroundecanoic acid (PFUnA)		0.025	0.0247	ug/L	99	(70-130)	30	8.9

EPA Method 537.1 by EPA 537.1

Prep Batch: 1277343 Analytical Batch: 1277610

Analysis Date: 09/29/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0237	ug/L	101	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0233	ug/L	99	(70-130)	30	1.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00204	ug/L	109	(50-150)		
MS_202009250044	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00193	ug/L	102	(50-150)		
MSD_202009250044	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00194	ug/L	103	(50-150)	50	0.61
LCS1	13C2-PFDA (S)		100	116	%	116	(70-130)		
LCS2	13C2-PFDA (S)		100	109	%	109	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	116	%	116	(70-130)		
MS_202009250044	13C2-PFDA (S)		100	115	%	115	(70-130)		
MSD_202009250044	13C2-PFDA (S)		100	112	%	112	(70-130)		
LCS1	13C2-PFHxA (S)		100	120	%	121	(70-130)		
LCS2	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MBLK	13C2-PFHxA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MS_202009250044	13C2-PFHxA (S)		100	120	%	120	(70-130)		
MSD_202009250044	13C2-PFHxA (S)		100	115	%	115	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	119	%	119	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			119	%	119	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	118	%	118	(50-150)		
MS_202009250044	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
MSD_202009250044	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	99.6	%	100	(70-130)		
MBLK	13C3-HFPO-DA (S)			96.3	%	96	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS_202009250044	13C3-HFPO-DA (S)		100	108	%	109	(70-130)		
MSD_202009250044	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202009250044	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
MSD_202009250044	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0256	ug/L	109	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0257	ug/L	109	(70-130)	30	0.39
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00222	ug/L	117	(50-150)		
MS_202009250044	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00224	ug/L	115	(50-150)		
MSD_202009250044	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00221	ug/L	113	(50-150)	50	1.6
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0244	ug/L	105	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0247	ug/L	106	(70-130)	30	1.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00209	ug/L	112	(50-150)		
MS_202009250044	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00202	ug/L	108	(50-150)		
MSD_202009250044	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00199	ug/L	107	(50-150)	50	1.4
LCS1	d3-NMeFOSAA (I)		100	123	%	123	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	125	%	125	(50-150)		
MBLK	d3-NMeFOSAA (I)			120	%	120	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	121	%	121	(50-150)		
MS_202009250044	d3-NMeFOSAA (I)		100	123	%	123	(50-150)		
MSD_202009250044	d3-NMeFOSAA (I)		100	123	%	123	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MBLK	d5-NEtFOSAA (S)			111	%	111	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
MS_202009250044	d5-NEtFOSAA (S)		100	118	%	118	(70-130)		
MSD_202009250044	d5-NEtFOSAA (S)		100	113	%	113	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0247	ug/L	99	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0240	ug/L	96	(70-130)	30	2.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00200	ug/L	100	(50-150)		
MS_202009250044	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00200	ug/L	99	(50-150)		
MSD_202009250044	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00198	ug/L	98	(50-150)	50	0.93
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0245	ug/L	98	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0249	ug/L	100	(70-130)	30	1.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00204	ug/L	102	(50-150)		
MS_202009250044	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00236	ug/L	118	(50-150)		
MSD_202009250044	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00224	ug/L	112	(50-150)	50	5.0

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 894497
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0260	ug/L	104	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0256	ug/L	102	(70-130)	30	1.6
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00240	ug/L	120	(50-150)		
MS_202009250044	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00218	ug/L	107	(50-150)		
MSD_202009250044	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00221	ug/L	109	(50-150)	50	1.5
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0237	ug/L	107	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0243	ug/L	110	(70-130)	30	2.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00206	ug/L	117	(50-150)		
MS_202009250044	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00198	ug/L	109	(50-150)		
MSD_202009250044	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00203	ug/L	112	(50-150)	50	2.3
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0268	ug/L	107	(70-130)	30	0.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202009250044	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00226	ug/L	111	(50-150)		
MSD_202009250044	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00223	ug/L	110	(50-150)	50	1.3
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0251	ug/L	100	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0241	ug/L	96	(70-130)	30	4.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202009250044	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00217	ug/L	108	(50-150)		
MSD_202009250044	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00214	ug/L	106	(50-150)	50	1.5
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0274	ug/L	110	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0279	ug/L	111	(70-130)	30	1.8
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00238	ug/L	119	(50-150)		
MS_202009250044	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00242	ug/L	121	(50-150)		
MSD_202009250044	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00240	ug/L	120	(50-150)	50	0.73
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0250	ug/L	110	(70-130)	30	1.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00222	ug/L	122	(50-150)		
MS_202009250044	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00208	ug/L	114	(50-150)		
MSD_202009250044	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00208	ug/L	114	(50-150)	50	0.024
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0277	ug/L	111	(70-130)	30	3.3

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS_202009250044	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00241	ug/L	110	(50-150)		
MSD_202009250044	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00247	ug/L	113	(50-150)	50	2.5
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0270	ug/L	108	(70-130)	30	3.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00233	ug/L	117	(50-150)		
MS_202009250044	Perfluorononanoic acid (PFNA)	ND	0.002	0.00237	ug/L	114	(50-150)		
MSD_202009250044	Perfluorononanoic acid (PFNA)	ND	0.002	0.00236	ug/L	114	(50-150)	50	0.55
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0244	ug/L	105	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)	30	1.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00217	ug/L	117	(50-150)		
MS_202009250044	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00221	ug/L	111	(50-150)		
MSD_202009250044	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00216	ug/L	108	(50-150)	50	2.3
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0264	ug/L	105	(70-130)	30	0.76
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00232	ug/L	116	(50-150)		
MS_202009250044	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00235	ug/L	110	(50-150)		
MSD_202009250044	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00235	ug/L	110	(50-150)	50	0.13
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0228	ug/L	91	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0210	ug/L	84	(70-130)	30	8.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00191	ug/L	96	(50-150)		
MS_202009250044	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00200	ug/L	98	(50-150)		
MSD_202009250044	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00201	ug/L	99	(50-150)	50	0.44
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0246	ug/L	99	(70-130)	30	3.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00215	ug/L	108	(50-150)		
MS_202009250044	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00208	ug/L	103	(50-150)		
MSD_202009250044	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00212	ug/L	105	(50-150)	50	2.0
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0259	ug/L	104	(70-130)	30	5.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00235	ug/L	117	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202009250044	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00244	ug/L	121	(50-150)		
MSD_202009250044	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00234	ug/L	117	(50-150)	50	4.3

EPA Method 537.1 by EPA 537.1

Prep Batch: 1278072 Analytical Batch: 1278774

Analysis Date: 10/02/2020

DUP_202009280433	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0269	ug/L	114	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0272	ug/L	116	(70-130)	30	1.1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00197	ug/L	105	(50-150)		
MS_202009280443	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00196	ug/L	104	(50-150)		
DUP_202009280433	13C2-PFDA (S)			123	%	123	(70-130)		
LCS1	13C2-PFDA (S)		100	107	%	107	(70-130)		
LCS2	13C2-PFDA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	105	%	105	(70-130)		
MS_202009280443	13C2-PFDA (S)		100	129	%	129	(70-130)		
DUP_202009280433	13C2-PFHxA (S)			105	%	105	(70-130)		
LCS1	13C2-PFHxA (S)		100	117	%	117	(70-130)		
LCS2	13C2-PFHxA (S)		100	118	%	118	(70-130)		
MBLK	13C2-PFHxA (S)			121	%	121	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	118	%	118	(70-130)		
MS_202009280443	13C2-PFHxA (S)		100	92.7	%	93	(70-130)		
DUP_202009280433	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
MS_202009280443	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
DUP_202009280433	13C3-HFPO-DA (S)			103	%	103	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MBLK	13C3-HFPO-DA (S)			110	%	111	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
MS_202009280443	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
DUP_202009280433	13C4-PFOS- IS#2 (I)			98.9	%	99	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	95.9	%	96	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C4-PFOS- IS#2 (I)			96.2	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MS_202009280443	13C4-PFOS- IS#2 (I)		100	99.6	%	100	(50-150)		
DUP_202009280433	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0306	ug/L	130	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0305	ug/L	129	(70-130)	30	0.33
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00231	ug/L	122	(50-150)		
MS_202009280443	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00224	ug/L	118	(50-150)		
DUP_202009280433	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0296	ug/L	127	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0299	ug/L	128	(70-130)	30	1.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00216	ug/L	116	(50-150)		
MS_202009280443	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00218	ug/L	117	(50-150)		
DUP_202009280433	d3-NMeFOSAA (I)			143	%	143	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	93.3	%	93	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	93.6	%	94	(50-150)		
MBLK	d3-NMeFOSAA (I)			90.4	%	90	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	97.1	%	97	(50-150)		
MS_202009280443	d3-NMeFOSAA (I)		100	148	%	148	(50-150)		
DUP_202009280433	d5-NEtFOSAA (S)			143	%	143	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MBLK	d5-NEtFOSAA (S)			112	%	112	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MS_202009280443	d5-NEtFOSAA (S)		100	147	%	147	(70-130)		
DUP_202009280433	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0282	ug/L	113	(70-130)	30	0.71
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00211	ug/L	105	(50-150)		
MS_202009280443	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00220	ug/L	106	(50-150)		
DUP_202009280433	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0302	ug/L	121	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0302	ug/L	121	(70-130)	30	0.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00227	ug/L	113	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202009280443	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00282	ug/L	140	(50-150)		
DUP_202009280433	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0299	ug/L	120	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0304	ug/L	122	(70-130)	30	1.7
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00223	ug/L	111	(50-150)		
MS_202009280443	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00237	ug/L	117	(50-150)		
DUP_202009280433	Perfluorobutanesulfonic acid (PFBS)	0.0063		0.00658	ug/L		(0-30)	30	4.7
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0285	ug/L	129	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0276	ug/L	125	(70-130)	30	3.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00218	ug/L	123	(50-150)		
MS_202009280443	Perfluorobutanesulfonic acid (PFBS)	0.012	0.0018	0.0118	ug/L	-0.0338	(50-150)		
DUP_202009280433	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0283	ug/L	113	(70-130)	30	0.71
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00207	ug/L	103	(50-150)		
MS_202009280443	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00260	ug/L	124	(50-150)		
DUP_202009280433	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0260	ug/L	104	(70-130)	30	1.5
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00193	ug/L	97	(50-150)		
MS_202009280443	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00183	ug/L	89	(50-150)		
DUP_202009280433	Perfluoroheptanoic acid (PFHpA)	0.0036		0.00308	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0325	ug/L	130	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0324	ug/L	130	(70-130)	30	0.31
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00251	ug/L	125	(50-150)		
MS_202009280443	Perfluoroheptanoic acid (PFHpA)	0.0050	0.002	0.00743	ug/L	124	(50-150)		
DUP_202009280433	Perfluorohexanesulfonic acid (PFHxS)	0.016		0.0135	ug/L		(0-30)	30	16
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0296	ug/L	130	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0294	ug/L	129	(70-130)	30	0.68
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00224	ug/L	123	(50-150)		
MS_202009280443	Perfluorohexanesulfonic acid (PFHxS)	0.012	0.0018	0.0204	ug/L	427	(50-150)		
DUP_202009280433	Perfluorohexanoic acid (PFHxA)	0.0048		0.00478	ug/L		(0-30)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 894497
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0314	ug/L	125	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0316	ug/L	126	(70-130)	30	0.64
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00243	ug/L	122	(50-150)		
MS_202009280443	Perfluorohexanoic acid (PFHxA)	0.010	0.002	0.0117	ug/L	84	(50-150)		
DUP_202009280433	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0307	ug/L	123	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0307	ug/L	123	(70-130)	30	0.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	116	(50-150)		
MS_202009280443	Perfluorononanoic acid (PFNA)	ND	0.002	0.00366	ug/L	145	(50-150)		
DUP_202009280433	Perfluorooctanesulfonic acid (PFOS)	0.030		0.0300	ug/L		(0-30)	30	0.033
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0278	ug/L	120	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0282	ug/L	122	(70-130)	30	1.4
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00215	ug/L	116	(50-150)		
MS_202009280443	Perfluorooctanesulfonic acid (PFOS)	0.013	0.0019	0.0165	ug/L	201	(50-150)		
DUP_202009280433	Perfluorooctanoic acid (PFOA)	0.0098		0.00934	ug/L		(0-30)	30	4.8
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0302	ug/L	121	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0302	ug/L	121	(70-130)	30	0.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00239	ug/L	119	(50-150)		
MS_202009280443	Perfluorooctanoic acid (PFOA)	0.015	0.002	0.0187	ug/L	204	(50-150)		
DUP_202009280433	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0281	ug/L	113	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0278	ug/L	111	(70-130)	30	1.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202009280443	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00272	ug/L	130	(50-150)		
DUP_202009280433	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0283	ug/L	113	(70-130)	30	0.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	101	(50-150)		
MS_202009280443	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00242	ug/L	120	(50-150)		
DUP_202009280433	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0279	ug/L	112	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0277	ug/L	111	(70-130)	30	0.72

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 894497
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00211	ug/L	105	(50-150)		
MS_202009280443	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00291	ug/L	144	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/05/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 10/05/2020

, Tel Fax

Report of Analysis by 24-Hour Collert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)* (Tot, E., Coli)

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 10/05/2020

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**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/05/2020

Quant Report - Page 1 of 1

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Monrovia, California 91016-3629
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Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 895705
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 895705
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **October 01, 2020 at 1152**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202010010380</u>	GAC-1-20201001 Static ID: 537.1 @537.1	10/01/2020 0813
<u>202010010381</u>	GAC-2-20201001 Static ID: 537.1 @537.1	10/01/2020 0816
<u>202010010382</u>	GAC-3-20201001 Static ID: 537.1 @537.1	10/01/2020 0819
<u>202010010383</u>	GAC-4-20201001 Static ID: 537.1 @537.1	10/01/2020 0822
<u>202010010384</u>	IX-1-20201001 Static ID: 537.1 @537.1	10/01/2020 0825
<u>202010010385</u>	IX-2-20201001 Static ID: 537.1 @537.1	10/01/2020 0828
<u>202010010386</u>	IX-3-20201001 Static ID: 537.1 @537.1	10/01/2020 0831
<u>202010010387</u>	IX-4-20201001 Static ID: 537.1 @537.1	10/01/2020 0834
<u>202010010388</u>	GAC-5-20201001 Static ID: 537.1 @537.1	10/01/2020 1013
<u>202010010389</u>	GAC-6-20201001 Static ID: 537.1 @537.1	10/01/2020 1016
<u>202010010390</u>	GAC-7-20201001 Static ID: 537.1	10/01/2020 1019

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 895705
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **October 01, 2020** at **1152**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202010010391	GAC-8-20201001 Static ID: 537.1	10/01/2020 1022
	@537.1	
202010010392	IX-5-20201001 Static ID: 537.1	10/01/2020 1025
	@537.1	
202010010393	IX-6-20201001 Static ID: 537.1	10/01/2020 1028
	@537.1	
202010010394	IX-7-20201001 Static ID: 537.1	10/01/2020 1031
	@537.1	
202010010395	IX-8-20201001 Static ID: 537.1	10/01/2020 1034
	@537.1	

Test Description

@537.1 -- EPA Method 537.1



895705

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302																																																																																																																																																																																																						
LABORATORY: Eurofins Eaton Analytical		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang																																																																																																																																																																																																						
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		SAMPLER(S): (PRINT) RBT																																																																																																																																																																																																						
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.																																																																																																																																																																																																								
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Relinquished by: (Signature) <i>Miae Jeon</i>		Received by: (Signature) <i>Michael Lee</i>		Date: 10-1-2020																																																																																																																																																																																																						
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895705

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) RDT								
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		REQUESTED ANALYSES Please check box or fill in blank as needed.										
LABORATORY: Eurofins Eaton Analytical		Turnaround Time: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD										
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rrtorres@gsi-net.com; Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO ₃), Chloride (EPA 300.0)	Alkalinity (as CaCO ₃), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	IX-5 - 20201001	10-1	1025	Water	2		X		X			
	IX-6 - 20201001		1028	Water	1		X		X			
	IX-7 - 20201001		1031	Water	1		X		X			
	IX-8 - 20201001		1034	Water	1		X		X			
	MB-INF			Water					X			
	MB-INF-DUP			Water					X			
	FB			Water					X			
Relinquished by: (Signature) <u>Miae Jeon</u> / <u>EEF 10-1-20 1152</u> Date: <u>10-1-2020</u> Time: <u>1152</u>												
Relinquished by: (Signature) _____ Date: _____ Time: _____												
Relinquished by: (Signature) _____ Date: _____ Time: _____												



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 895705

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 649A (Observation = 20.4 °C) (Corr. Factor = -0.2 °C) (Final = 20.2 °C)

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) **Chemistry:** >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) **Microbiology, Distribution:** < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) **Microbiology, Surface Water:** < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) **VOA and Radon Headspace:**

No Samples with Headspace:

Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/≤6	>6mm	Samp ID	Bottle #	None/≤6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY:	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
<u>you</u>	<u>[Signature]</u>	<u>Paul Meills</u>	Eurofins Eaton Analytical	<u>10-1-20</u>	<u>1152</u>

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 895705
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Tel: (626) 386-1100
 Fax: (626) 988-3757
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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/05/2020 19:56	Perfluorohexanoic acid (PFHxA)	202010010384 IX-1-20201001	0.0024		ug/L	0.0020
10/05/2020 20:06	Perfluorohexanoic acid (PFHxA)	202010010385 IX-2-20201001	0.0039		ug/L	0.0020
10/05/2020 20:25	Perfluorohexanoic acid (PFHxA)	202010010386 IX-3-20201001	0.0040		ug/L	0.0020
10/05/2020 20:34	Perfluorohexanoic acid (PFHxA)	202010010387 IX-4-20201001	0.0038		ug/L	0.0020
10/05/2020 20:44	Perfluorobutanesulfonic acid (PFBS)	202010010388 GAC-5-20201001	0.0058		ug/L	0.0020
10/05/2020 20:44	Perfluorohexanoic acid (PFHxA)		0.0051		ug/L	0.0020
10/05/2020 20:44	Perfluorooctanoic acid (PFOA)		0.0036		ug/L	0.0020
10/05/2020 20:54	Perfluorobutanesulfonic acid (PFBS)	202010010389 GAC-6-20201001	0.0082		ug/L	0.0020
10/05/2020 20:54	Perfluorohexanoic acid (PFHxA)		0.0055		ug/L	0.0020
10/05/2020 21:03	Perfluorobutanesulfonic acid (PFBS)	202010010390 GAC-7-20201001	0.0082		ug/L	0.0020
10/05/2020 21:03	Perfluorohexanoic acid (PFHxA)		0.0057		ug/L	0.0020
10/07/2020 00:54	Perfluorohexanoic acid (PFHxA)	202010010392 IX-5-20201001	0.0034		ug/L	0.0020
10/07/2020 01:13	Perfluorohexanoic acid (PFHxA)	202010010393 IX-6-20201001	0.0054		ug/L	0.0020
10/07/2020 02:58	Perfluoroheptanoic acid (PFHpA)	202010010394 IX-7-20201001	0.0026		ug/L	0.0020
10/07/2020 02:58	Perfluorohexanoic acid (PFHxA)		0.0061		ug/L	0.0020
10/07/2020 03:08	Perfluorohexanoic acid (PFHxA)	202010010395 IX-8-20201001	0.0066		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20201001 (202010010380)					Sampled on 10/01/2020 0813				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	13C2-PFDA	113	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	13C2-PFHxA	123	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	108	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	103	%		1
10/02/20	10/05/20 19:37	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	112	%		1

GAC-2-20201001 (202010010381)					Sampled on 10/01/2020 0816				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	13C2-PFDA	101	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	13C2-PFHxA	110	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	94	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	101	%		1
10/02/20	10/05/20 18:40	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	114	%		1

GAC-3-20201001 (202010010382)

Sampled on 10/01/2020 0819

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	13C2-PFDA	108	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	13C2-PFHxA	116	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	102	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	104	%		1
10/02/20	10/05/20 19:46	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	109	%		1

GAC-4-20201001 (202010010383)

Sampled on 10/01/2020 0822

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	13C2-PFDA	99	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	13C2-PFHxA	110	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	96	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	101	%		1
10/02/20	10/05/20 18:20	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	106	%		1

IX-1-20201001 (202010010384)

Static ID: 537.1

Sampled on 10/01/2020 0825

EPA 537.1 - EPA Method 537.1

10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	13C2-PFDA	112	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	13C2-PFHxA	121	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	106	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	101	%		1
10/02/20	10/05/20 19:56	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	114	%		1

IX-2-20201001 (202010010385)

Sampled on 10/01/2020 0828

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	13C2-PFDA	119	%		1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	13C2-PFHxA	127	%		1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	115	%		1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	102	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 20:06	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	120	%		1
IX-3-20201001 (202010010386)					Sampled on 10/01/2020 0831				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	13C2-PFDA	113	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	13C2-PFHxA	118	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/02/20	10/05/20 20:25	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	113	%		1

IX-4-20201001 (202010010387)

Sampled on 10/01/2020 0834

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	13C2-PFDA	103	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	13C2-PFHxA	107	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	96	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/02/20	10/05/20 20:34	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	115	%		1

GAC-5-20201001 (202010010388)

Sampled on 10/01/2020 1013

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0058	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0051	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0036	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	13C2-PFDA	101	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	13C2-PFHxA	106	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	93	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/02/20	10/05/20 20:44	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	110	%		1

GAC-6-20201001 (202010010389)

Sampled on 10/01/2020 1016

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0082	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0055	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	13C2-PFDA	112	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	13C2-PFHxA	117	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	103	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	100	%		1
10/02/20	10/05/20 20:54	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	117	%		1

GAC-7-20201001 (202010010390)

Static ID: 537.1

Sampled on 10/01/2020 1019

EPA 537.1 - EPA Method 537.1

10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0082	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	13C2-PFDA	100	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	13C2-PFHxA	112	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	99	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/02/20	10/05/20 21:03	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	113	%		1

GAC-8-20201001 (202010010391)

Sampled on 10/01/2020 1022

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	13C2-PFDA	111	%		1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	13C2-PFHxA	120	%		1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	13C3-HFPO-DA	108	%		1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	d3-NMeFOSAA	100	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/02/20	10/05/20 21:13	1278564	1279173	(EPA 537.1)	d5-NEtFOSAA	115	%		1
IX-5-20201001 (202010010392)					Sampled on 10/01/2020 1025				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	13C2-PFDA	92	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	13C2-PFHxA	93	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	13C3-HFPO-DA	85	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	d3-NMeFOSAA	112	%		1
10/04/20	10/07/20 00:54	1278831	1279434	(EPA 537.1)	d5-NEtFOSAA	91	%		1

IX-6-20201001 (202010010393)					Sampled on 10/01/2020 1028				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0054	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	13C2-PFDA	86	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	13C2-PFHxA	87	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	13C3-HFPO-DA	80	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	d3-NMeFOSAA	112	%		1
10/04/20	10/07/20 01:13	1278831	1279434	(EPA 537.1)	d5-NETFOSAA	87	%		1

IX-7-20201001 (202010010394)

Static ID: 537.1

Sampled on 10/01/2020 1031

EPA 537.1 - EPA Method 537.1

10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0026	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0061	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	13C2-PFDA	100	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	13C2-PFHxA	96	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	13C3-HFPO-DA	88	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	d3-NMeFOSAA	116	%		1
10/04/20	10/07/20 02:58	1278831	1279434	(EPA 537.1)	d5-NEtFOSAA	91	%		1

IX-8-20201001 (202010010395)

Sampled on 10/01/2020 1034

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1

Rounding on totals after summation.

(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 895705
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/01/2020 1152

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	13C2-PFDA	99	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	13C2-PFHxA	102	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	13C3-HFPO-DA	92	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	d3-NMeFOSAA	115	%		1
10/04/20	10/07/20 03:08	1278831	1279434	(EPA 537.1)	d5-NEtFOSAA	89	%		1

Rounding on totals after summation.
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Report: 895705
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

EPA Method 537.1

Prep Batch: 1278564 Analytical Batch: 1279173

Analysis Date: 10/05/2020

202010010380	GAC-1-20201001
202010010381	GAC-2-20201001
202010010382	GAC-3-20201001
202010010383	GAC-4-20201001
202010010384	IX-1-20201001
202010010385	IX-2-20201001
202010010386	IX-3-20201001
202010010387	IX-4-20201001
202010010388	GAC-5-20201001
202010010389	GAC-6-20201001
202010010390	GAC-7-20201001
202010010391	GAC-8-20201001

Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ

EPA Method 537.1

Prep Batch: 1278831 Analytical Batch: 1279434

Analysis Date: 10/07/2020

202010010392	IX-5-20201001
202010010393	IX-6-20201001
202010010394	IX-7-20201001
202010010395	IX-8-20201001

Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ

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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1278564 Analytical Batch: 1279173					Analysis Date: 10/05/2020				
DUP_202010010381	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0248	ug/L	105	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0255	ug/L	108	(70-130)	30	2.8
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00210	ug/L	111	(50-150)		
MS_202010010383	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00201	ug/L	107	(50-150)		
DUP_202010010381	13C2-PFDA (S)			94.4	%	94	(70-130)		
LCS1	13C2-PFDA (S)		100	118	%	118	(70-130)		
LCS2	13C2-PFDA (S)		100	115	%	115	(70-130)		
MBLK	13C2-PFDA (S)			105	%	105	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	116	%	116	(70-130)		
MS_202010010383	13C2-PFDA (S)		100	111	%	111	(70-130)		
DUP_202010010381	13C2-PFHxA (S)			102	%	102	(70-130)		
LCS1	13C2-PFHxA (S)		100	114	%	114	(70-130)		
LCS2	13C2-PFHxA (S)		100	114	%	115	(70-130)		
MBLK	13C2-PFHxA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MS_202010010383	13C2-PFHxA (S)		100	114	%	114	(70-130)		
DUP_202010010381	13C2-PFOA- IS#1 (I)			124	%	124	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS_202010010383	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
DUP_202010010381	13C3-HFPO-DA (S)			89.3	%	89	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	99.2	%	99	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MBLK	13C3-HFPO-DA (S)			89.4	%	89	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	98.9	%	99	(70-130)		
MS_202010010383	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
DUP_202010010381	13C4-PFOS- IS#2 (I)			99.8	%	100	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	96.8	%	97	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.3	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.2	%	99	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202010010383	13C4-PFOS- IS#2 (I)		100	98.4	%	98	(50-150)		
DUP_202010010381	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0271	ug/L	115	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0298	ug/L	126	(70-130)	30	9.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00225	ug/L	119	(50-150)		
MS_202010010383	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00218	ug/L	115	(50-150)		
DUP_202010010381	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0263	ug/L	113	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0274	ug/L	118	(70-130)	30	4.1
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00221	ug/L	119	(50-150)		
MS_202010010383	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00217	ug/L	117	(50-150)		
DUP_202010010381	d3-NMeFOSAA (I)			103	%	103	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MBLK	d3-NMeFOSAA (I)			103	%	103	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS_202010010383	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
DUP_202010010381	d5-NEtFOSAA (S)			113	%	113	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MBLK	d5-NEtFOSAA (S)			99.2	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MS_202010010383	d5-NEtFOSAA (S)		100	114	%	115	(70-130)		
DUP_202010010381	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0236	ug/L	95	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0260	ug/L	104	(70-130)	30	9.3
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00208	ug/L	104	(50-150)		
MS_202010010383	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00202	ug/L	101	(50-150)		
DUP_202010010381	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0288	ug/L	115	(70-130)	30	7.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00242	ug/L	121	(50-150)		
MS_202010010383	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00241	ug/L	120	(50-150)		
DUP_202010010381	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0260	ug/L	104	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0282	ug/L	113	(70-130)	30	8.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00240	ug/L	120	(50-150)		
MS_202010010383	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00227	ug/L	112	(50-150)		
DUP_202010010381	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0202	ug/L	91	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0217	ug/L	98	(70-130)	30	7.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00193	ug/L	109	(50-150)		
MS_202010010383	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00185	ug/L	104	(50-150)		
DUP_202010010381	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0290	ug/L	116	(70-130)	30	7.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00239	ug/L	120	(50-150)		
MS_202010010383	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00224	ug/L	111	(50-150)		
DUP_202010010381	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0264	ug/L	106	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0287	ug/L	115	(70-130)	30	8.3
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010010383	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202010010381	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0306	ug/L	122	(70-130)	30	7.8
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00251	ug/L	125	(50-150)		
MS_202010010383	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00233	ug/L	116	(50-150)		
DUP_202010010381	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0257	ug/L	113	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0269	ug/L	118	(70-130)	30	4.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00226	ug/L	124	(50-150)		
MS_202010010383	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00216	ug/L	118	(50-150)		
DUP_202010010381	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0264	ug/L	105	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0294	ug/L	118	(70-130)	30	11

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 895705
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00244	ug/L	122	(50-150)		
MS_202010010383	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00235	ug/L	115	(50-150)		
DUP_202010010381	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0293	ug/L	117	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0318	ug/L	127	(70-130)	30	8.2
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00258	ug/L	129	(50-150)		
MS_202010010383	Perfluorononanoic acid (PFNA)	ND	0.002	0.00245	ug/L	119	(50-150)		
DUP_202010010381	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0272	ug/L	118	(70-130)	30	9.2
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00229	ug/L	124	(50-150)		
MS_202010010383	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00216	ug/L	112	(50-150)		
DUP_202010010381	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0291	ug/L	117	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0310	ug/L	124	(70-130)	30	6.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00272	ug/L	136	(50-150)		
MS_202010010383	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00263	ug/L	126	(50-150)		
DUP_202010010381	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0312	ug/L	125	(70-130)	30	4.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00245	ug/L	122	(50-150)		
MS_202010010383	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00225	ug/L	106	(50-150)		
DUP_202010010381	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0304	ug/L	122	(70-130)	30	7.9
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00237	ug/L	118	(50-150)		
MS_202010010383	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00220	ug/L	110	(50-150)		
DUP_202010010381	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0275	ug/L	110	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0288	ug/L	115	(70-130)	30	4.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00231	ug/L	116	(50-150)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202010010383	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00214	ug/L	106	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1278831 Analytical Batch: 1279434

Analysis Date: 10/07/2020

DUP_202010010393	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0231	ug/L	98	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0243	ug/L	103	(70-130)	30	5.1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00200	ug/L	106	(50-150)		
MS2_202010010392	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0461	ug/L	98	(70-130)		
DUP_202010010393	13C2-PFDA (S)			93.6	%	94	(70-130)		
LCS1	13C2-PFDA (S)		100	96.2	%	96	(70-130)		
LCS2	13C2-PFDA (S)		100	93.2	%	93	(70-130)		
MBLK	13C2-PFDA (S)			95.5	%	95	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	95.4	%	95	(70-130)		
MS2_202010010392	13C2-PFDA (S)		100	96.2	%	96	(70-130)		
DUP_202010010393	13C2-PFHxA (S)			95.6	%	96	(70-130)		
LCS1	13C2-PFHxA (S)		100	103	%	103	(70-130)		
LCS2	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFHxA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MS2_202010010392	13C2-PFHxA (S)		100	97.2	%	97	(70-130)		
DUP_202010010393	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	94.9	%	95	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	97.4	%	97	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			95.1	%	95	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	97.7	%	98	(50-150)		
MS2_202010010392	13C2-PFOA- IS#1 (I)		100	97.4	%	97	(50-150)		
DUP_202010010393	13C3-HFPO-DA (S)			88.1	%	88	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	92.5	%	93	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	91.1	%	91	(70-130)		
MBLK	13C3-HFPO-DA (S)			91.5	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	90.0	%	90	(70-130)		
MS2_202010010392	13C3-HFPO-DA (S)		100	89.2	%	89	(70-130)		
DUP_202010010393	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			99.6	%	100	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 895705
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MS2_202010010392	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
DUP_202010010393	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0278	ug/L	118	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0276	ug/L	117	(70-130)	30	1.1
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00237	ug/L	126	(50-150)		
MS2_202010010392	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0529	ug/L	109	(70-130)		
DUP_202010010393	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0252	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0264	ug/L	113	(70-130)	30	4.7
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00219	ug/L	118	(50-150)		
MS2_202010010392	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0508	ug/L	109	(70-130)		
DUP_202010010393	d3-NMeFOSAA (I)			108	%	108	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MBLK	d3-NMeFOSAA (I)			102	%	102	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MS2_202010010392	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
DUP_202010010393	d5-NEtFOSAA (S)			91.6	%	92	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	90.4	%	90	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	90.9	%	91	(70-130)		
MBLK	d5-NEtFOSAA (S)			88.7	%	89	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	91.6	%	92	(70-130)		
MS2_202010010392	d5-NEtFOSAA (S)		100	87.9	%	88	(70-130)		
DUP_202010010393	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0277	ug/L	111	(70-130)	30	1.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00237	ug/L	118	(50-150)		
MS2_202010010392	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0555	ug/L	111	(70-130)		
DUP_202010010393	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0272	ug/L	109	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0282	ug/L	113	(70-130)	30	3.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00242	ug/L	121	(50-150)		
MS2_202010010392	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0544	ug/L	109	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 895705
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202010010393	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0266	ug/L	106	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0282	ug/L	113	(70-130)	30	5.8
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00232	ug/L	116	(50-150)		
MS2_202010010392	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0547	ug/L	109	(70-130)		
DUP_202010010393	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0238	ug/L	108	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0251	ug/L	113	(70-130)	30	5.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00217	ug/L	123	(50-150)		
MS2_202010010392	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0482	ug/L	108	(70-130)		
DUP_202010010393	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0284	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0292	ug/L	117	(70-130)	30	2.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00249	ug/L	124	(50-150)		
MS2_202010010392	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0588	ug/L	118	(70-130)		
DUP_202010010393	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0293	ug/L	117	(70-130)	30	4.5
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00247	ug/L	124	(50-150)		
MS2_202010010392	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0562	ug/L	112	(70-130)		
DUP_202010010393	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0288	ug/L	115	(70-130)	30	2.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00250	ug/L	125	(50-150)		
MS2_202010010392	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0549	ug/L	108	(70-130)		
DUP_202010010393	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0245	ug/L	107	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0258	ug/L	113	(70-130)	30	5.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00220	ug/L	121	(50-150)		
MS2_202010010392	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0492	ug/L	108	(70-130)		
DUP_202010010393	Perfluorohexanoic acid (PFHxA)	0.0054		0.00588	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0303	ug/L	121	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0303	ug/L	121	(70-130)	30	0.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00262	ug/L	131	(50-150)		
MS2_202010010392	Perfluorohexanoic acid (PFHxA)	0.0034	0.05	0.0608	ug/L	115	(70-130)		
DUP_202010010393	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0303	ug/L	121	(70-130)	30	1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00275	ug/L	138	(50-150)		
MS2_202010010392	Perfluorononanoic acid (PFNA)	ND	0.05	0.0620	ug/L	124	(70-130)		
DUP_202010010393	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0253	ug/L	109	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0265	ug/L	115	(70-130)	30	4.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00230	ug/L	124	(50-150)		
MS2_202010010392	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0510	ug/L	110	(70-130)		
DUP_202010010393	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0299	ug/L	120	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0305	ug/L	122	(70-130)	30	2.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00269	ug/L	135	(50-150)		
MS2_202010010392	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0608	ug/L	119	(70-130)		
DUP_202010010393	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0280	ug/L	112	(70-130)	30	6.3
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00236	ug/L	118	(50-150)		
MS2_202010010392	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0539	ug/L	107	(70-130)		
DUP_202010010393	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0311	ug/L	125	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0315	ug/L	126	(70-130)	30	1.3
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00268	ug/L	134	(50-150)		
MS2_202010010392	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0606	ug/L	121	(70-130)		
DUP_202010010393	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0271	ug/L	108	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0280	ug/L	112	(70-130)	30	3.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 895705
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00241	ug/L	120	(50-150)		
MS2_202010010392	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0544	ug/L	109	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/07/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 10/07/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 10/07/2020

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/07/2020

Quant Report - Page 1 of 1

Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 897233
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 897233
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **October 08, 2020 at 1249**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202010080580</u>	GAC-1-20201008 Static ID: 537.1 @537.1	10/08/2020 0933
<u>202010080581</u>	GAC-2-20201008 Static ID: 537.1 @537.1	10/08/2020 0936
<u>202010080582</u>	GAC-3-20201008 Static ID: 537.1 @537.1	10/08/2020 0939
<u>202010080583</u>	GAC-4-20201008 Static ID: 537.1 @537.1	10/08/2020 0942
<u>202010080584</u>	IX-1-20201008 Static ID: 537.1 @537.1	10/08/2020 0945
<u>202010080585</u>	IX-2-20201008 Static ID: 537.1 @537.1	10/08/2020 0948
<u>202010080586</u>	IX-3-20201008 Static ID: 537.1 @537.1	10/08/2020 0951
<u>202010080587</u>	IX-4-20201008 Static ID: 537.1 @537.1	10/08/2020 0954
<u>202010080588</u>	GAC-5-20201008 @537.1	10/08/2020 1133
<u>202010080589</u>	GAC-6-20201008 @537.1	10/08/2020 1136
<u>202010080590</u>	GAC-7-20201008 @537.1	10/08/2020 1139
<u>202010080591</u>	GAC-8-20201008	10/08/2020 1142

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 897233
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
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The following samples were received from you on **October 08, 2020** at **1249**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
<u>202010080592</u>	IX-5-20201008	10/08/2020 1145
	@537.1	
<u>202010080593</u>	IX-6-20201008	10/08/2020 1148
	@537.1	
<u>202010080594</u>	IX-7-20201008	10/08/2020 1151
	@537.1	
<u>202010080595</u>	IX-8-20201008	10/08/2020 1154
	@537.1	

Test Description

@537.1 -- EPA Method 537.1

897733

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) RDT																																																																																																																																																																																																									
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		REQUESTED ANALYSES Please check box or fill in blank as needed.																																																																																																																																																																																																											
LABORATORY: Eurofins Eaton Analytical		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2">LAB USE ONLY</th> <th rowspan="2">SAMPLE ID</th> <th colspan="2">SAMPLING</th> <th rowspan="2">MATRIX</th> <th rowspan="2">NO. OF CONT.</th> <th colspan="3">PRESERVATION</th> <th rowspan="2">PFAS - full list (EPA 537.1)</th> <th rowspan="2">Sulfate, Nitrate (as N), Nitrate (as NO₃), Chloride (EPA 300.0)</th> <th rowspan="2">Alkalinity (as CaCO₃), (SM 2320B)</th> <th rowspan="2">TOC (SM 5310C)</th> </tr> <tr> <th>DATE</th> <th>TIME</th> <th>Unpreserved</th> <th>Preserved</th> <th>Field Filtered</th> </tr> <tr> <td></td> <td>GAC-1-20201008</td> <td>10-8</td> <td>0933</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-2-20201008</td> <td></td> <td>0936</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-3-20201008</td> <td></td> <td>0939</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-4-20201008</td> <td></td> <td>0942</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-1-20201008</td> <td></td> <td>0945</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-2-20201008</td> <td></td> <td>0948</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-3-20201008</td> <td></td> <td>0951</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>IX-4-20201008</td> <td></td> <td>0954</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>EH-INF</td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>EH-INF-DUP</td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td></td> <td>GAC-5-20201008</td> <td>10-8</td> <td>1133</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-6-20201008</td> <td></td> <td>1136</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-7-20201008</td> <td></td> <td>1139</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>GAC-8-20201008</td> <td></td> <td>1142</td> <td>Water</td> <td>2</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> </tr> </table>				LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO ₃), Chloride (EPA 300.0)	Alkalinity (as CaCO ₃), (SM 2320B)	TOC (SM 5310C)	DATE	TIME	Unpreserved	Preserved	Field Filtered		GAC-1-20201008	10-8	0933	Water	2				X					GAC-2-20201008		0936	Water	2				X					GAC-3-20201008		0939	Water	2				X					GAC-4-20201008		0942	Water	2				X					IX-1-20201008		0945	Water	2				X					IX-2-20201008		0948	Water	2				X					IX-3-20201008		0951	Water	2				X					IX-4-20201008		0954	Water	2				X					EH-INF			Water					X	X	X			EH-INF-DUP			Water					X	X	X			GAC-5-20201008	10-8	1133	Water	2				X					GAC-6-20201008		1136	Water	2				X					GAC-7-20201008		1139	Water	2				X					GAC-8-20201008		1142	Water	2				X			
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.			PRESERVATION				PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO ₃), Chloride (EPA 300.0)	Alkalinity (as CaCO ₃), (SM 2320B)					TOC (SM 5310C)																																																																																																																																																																																										
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	GAC-3-20201008		0939	Water	2				X																																																																																																																																																																																																				
	GAC-4-20201008		0942	Water	2				X																																																																																																																																																																																																				
	IX-1-20201008		0945	Water	2				X																																																																																																																																																																																																				
	IX-2-20201008		0948	Water	2				X																																																																																																																																																																																																				
	IX-3-20201008		0951	Water	2				X																																																																																																																																																																																																				
	IX-4-20201008		0954	Water	2				X																																																																																																																																																																																																				
	EH-INF			Water					X	X	X																																																																																																																																																																																																		
	EH-INF-DUP			Water					X	X	X																																																																																																																																																																																																		
	GAC-5-20201008	10-8	1133	Water	2				X																																																																																																																																																																																																				
	GAC-6-20201008		1136	Water	2				X																																																																																																																																																																																																				
	GAC-7-20201008		1139	Water	2				X																																																																																																																																																																																																				
	GAC-8-20201008		1142	Water	2				X																																																																																																																																																																																																				
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD		SPECIAL INSTRUCTIONS: Send report copies to pegaivin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results																																																																																																																																																																																																											
RELINQUISHED BY: <i>[Signature]</i> Date: <u>10-8-2020</u> Time: <u>12:48</u>		RECEIVED BY: <i>[Signature]</i> Date: <u>10/8/20</u> Time: <u>12:49</u>																																																																																																																																																																																																											

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070 TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com LABORATORY: Eurofins Eaton Analytical		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) RDT				
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.						
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rtorres@gsi-net.com; Provide EDD of sample results		Unpreserved <input type="checkbox"/>	Preserved <input type="checkbox"/>	Field Filtered <input type="checkbox"/>	PFAS - full list (EPA 537.1) <input checked="" type="checkbox"/>	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input type="checkbox"/>	Alkalinity (as CaCO3), (SM 2320B) <input type="checkbox"/>	TOC (SM 5310C) <input type="checkbox"/>
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.			
		TIME DATE	DATE TIME			Unpreserved	Preserved	Field Filtered
	IX-5 - 20201008	1145	10-8	Water	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	IX-6 - 20201008	1148	↓	Water	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	IX-7 - 20201008	1151	↓	Water	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	IX-8 - 20201008	1154	↓	Water	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	MB-INF			Water		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	MB-INF-DUP			Water		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	FB			Water		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relinquished by: (Signature) <u>[Signature]</u>						Received by: (Signature) <u>[Signature]</u>	Date: 10-8-2020	Time: 1248
Relinquished by: (Signature)						Received by: (Signature)	Date: 10/8/20	Time: 12:49
Relinquished by: (Signature)						Received by: (Signature)	Date:	Time:



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: SPMS

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 618A (Observation = 12.8 °C) (Corr. Factor = 0.2 °C) (Final = 12.6 °C)

TYPE OF ICE: Real Synthetic No Ice Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

- 5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____
- 6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA and Radon Headspace: No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients: _____

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: [Signature] PRINT NAME: _____ DATE: 10/8/20 TIME: 12:49

COMPANY/TITLE: Eurofins Eaton Analytical

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 897233
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/13/2020 00:12	Perfluorohexanoic acid (PFHxA)	202010080584 IX-1-20201008	0.0024		ug/L	0.0020
10/13/2020 00:21	Perfluorohexanoic acid (PFHxA)	202010080585 IX-2-20201008	0.0041		ug/L	0.0020
10/13/2020 00:31	Perfluorohexanoic acid (PFHxA)	202010080586 IX-3-20201008	0.0040		ug/L	0.0020
10/13/2020 14:14	Perfluorohexanoic acid (PFHxA)	202010080587 IX-4-20201008	0.0041		ug/L	0.0020
10/13/2020 00:50	Perfluorobutanesulfonic acid (PFBS)	202010080588 GAC-5-20201008	0.0060		ug/L	0.0020
10/13/2020 00:50	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
10/13/2020 00:50	Perfluorohexanoic acid (PFHxA)		0.0057		ug/L	0.0020
10/13/2020 00:50	Perfluorooctanoic acid (PFOA)		0.0039		ug/L	0.0020
10/13/2020 01:00	Perfluorobutanesulfonic acid (PFBS)	202010080589 GAC-6-20201008	0.010		ug/L	0.0020
10/13/2020 01:00	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
10/13/2020 01:20	Perfluorobutanesulfonic acid (PFBS)	202010080590 GAC-7-20201008	0.0084		ug/L	0.0020
10/13/2020 01:20	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
10/13/2020 01:31	Perfluorohexanoic acid (PFHxA)	202010080591 GAC-8-20201008	0.0021		ug/L	0.0020
10/13/2020 01:41	Perfluorohexanoic acid (PFHxA)	202010080592 IX-5-20201008	0.0038		ug/L	0.0020
10/13/2020 22:59	Perfluorohexanoic acid (PFHxA)	202010080593 IX-6-20201008	0.0063		ug/L	0.0020
10/13/2020 23:18	Perfluoroheptanoic acid (PFHpA)	202010080594 IX-7-20201008	0.0033		ug/L	0.0020
10/13/2020 23:18	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
10/14/2020 02:11	Perfluorohexanoic acid (PFHxA)	202010080595 IX-8-20201008	0.0064		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20201008 (202010080580)					Sampled on 10/08/2020 0933				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	13C2-PFDA	114	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	13C2-PFHxA	116	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	13C3-HFPO-DA	109	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	d3-NMeFOSAA	97	%		1
10/11/20	10/13/20 14:05	1280374	1281116	(EPA 537.1)	d5-NEtFOSAA	108	%		1

GAC-2-20201008 (202010080581)					Sampled on 10/08/2020 0936				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	13C2-PFDA	116	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	13C2-PFHxA	120	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	116	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	113	%		1
10/11/20	10/12/20 23:15	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	108	%		1

GAC-3-20201008 (202010080582)

Sampled on 10/08/2020 0939

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	13C2-PFDA	122	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	13C2-PFHxA	127	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	122	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	115	%		1
10/11/20	10/12/20 23:34	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	112	%		1

GAC-4-20201008 (202010080583)

Sampled on 10/08/2020 0942

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	13C2-PFDA	120	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	13C2-PFHxA	122	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	119	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	114	%		1
10/11/20	10/13/20 00:02	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	108	%		1

IX-1-20201008 (202010080584)

Static ID: 537.1

Sampled on 10/08/2020 0945

EPA 537.1 - EPA Method 537.1

10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

(c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	13C2-PFDA	123	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	13C2-PFHxA	128	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	122	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	114	%		1
10/11/20	10/13/20 00:12	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	113	%		1

IX-2-20201008 (202010080585)

Sampled on 10/08/2020 0948

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	13C2-PFDA	122	%		1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	13C2-PFHxA	128	%		1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	122	%		1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	114	%		1

Rounding on totals after summation.

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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 00:21	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	110	%		1
IX-3-20201008 (202010080586)						Sampled on 10/08/2020 0951			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	13C2-PFDA	120	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	13C2-PFHxA	128	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	123	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	114	%		1
10/11/20	10/13/20 00:31	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	109	%		1

IX-4-20201008 (202010080587)						Sampled on 10/08/2020 0954			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	13C2-PFDA	111	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	13C2-PFHxA	115	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	13C3-HFPO-DA	110	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	d3-NMeFOSAA	100	%		1
10/11/20	10/13/20 14:14	1280374	1281116	(EPA 537.1)	d5-NETFOSAA	101	%		1

GAC-5-20201008 (202010080588)

Sampled on 10/08/2020 1133

EPA 537.1 - EPA Method 537.1

10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0060	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0039	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	13C2-PFDA	120	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	13C2-PFHxA	118	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	116	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	113	%		1
10/11/20	10/13/20 00:50	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	111	%		1

GAC-6-20201008 (202010080589)

Sampled on 10/08/2020 1136

EPA 537.1 - EPA Method 537.1

10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	13C2-PFDA	121	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	13C2-PFHxA	119	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	119	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	112	%		1
10/11/20	10/13/20 01:00	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	106	%		1

GAC-7-20201008 (202010080590)

Sampled on 10/08/2020 1139

EPA 537.1 - EPA Method 537.1

10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0084	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	13C2-PFDA	126	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	13C2-PFHxA	125	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	120	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	109	%		1
10/11/20	10/13/20 01:20	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	112	%		1

GAC-8-20201008 (202010080591)

Sampled on 10/08/2020 1142

EPA 537.1 - EPA Method 537.1

10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0021	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	13C2-PFDA	125	%		1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	13C2-PFHxA	126	%		1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	122	%		1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	111	%		1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/11/20	10/13/20 01:31	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	114	%		1
IX-5-20201008 (202010080592)					Sampled on 10/08/2020 1145				
EPA 537.1 - EPA Method 537.1									
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	13C2-PFDA	126	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	13C2-PFHxA	128	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	13C3-HFPO-DA	125	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	d3-NMeFOSAA	112	%		1
10/11/20	10/13/20 01:41	1280374	1281011	(EPA 537.1)	d5-NEtFOSAA	112	%		1

IX-6-20201008 (202010080593)					Sampled on 10/08/2020 1148				
EPA 537.1 - EPA Method 537.1									
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	13C2-PFDA	111	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	13C2-PFHxA	115	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	13C3-HFPO-DA	110	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	d3-NMeFOSAA	101	%		1
10/12/20	10/13/20 22:59	1280556	1281194	(EPA 537.1)	d5-NETFOSAA	99	%		1

IX-7-20201008 (202010080594)

Sampled on 10/08/2020 1151

EPA 537.1 - EPA Method 537.1

10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	13C2-PFDA	110	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	13C2-PFHxA	116	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	13C3-HFPO-DA	113	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/12/20	10/13/20 23:18	1280556	1281194	(EPA 537.1)	d5-NEtFOSAA	102	%		1

IX-8-20201008 (202010080595)

Sampled on 10/08/2020 1154

EPA 537.1 - EPA Method 537.1

10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 897233
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/08/2020 1249

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	13C2-PFDA	104	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	13C2-PFHxA	106	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	13C3-HFPO-DA	102	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	d3-NMeFOSAA	102	%		1
10/12/20	10/14/20 02:11	1280556	1281194	(EPA 537.1)	d5-NEtFOSAA	99	%		1

Rounding on totals after summation.
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Report: 897233
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

EPA Method 537.1

Prep Batch: 1280374 Analytical Batch: 1281011

202010080581	GAC-2-20201008
202010080582	GAC-3-20201008
202010080583	GAC-4-20201008
202010080584	IX-1-20201008
202010080585	IX-2-20201008
202010080586	IX-3-20201008
202010080588	GAC-5-20201008
202010080589	GAC-6-20201008
202010080590	GAC-7-20201008
202010080591	GAC-8-20201008
202010080592	IX-5-20201008

Analysis Date: 10/12/2020

Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM

EPA Method 537.1

Prep Batch: 1280374 Analytical Batch: 1281116

202010080580	GAC-1-20201008
202010080587	IX-4-20201008

Analysis Date: 10/13/2020

Analyzed by: KAM
Analyzed by: KAM

EPA Method 537.1

Prep Batch: 1280556 Analytical Batch: 1281194

202010080593	IX-6-20201008
202010080594	IX-7-20201008
202010080595	IX-8-20201008

Analysis Date: 10/13/2020

Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1280374 Analytical Batch: 1281011					Analysis Date: 10/12/2020				
DUP_202010080582	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.02355	0.0258	ug/L				
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00205	ug/L	109	(50-150)		
MS1_202010080581	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0245	ug/L	104	(70-130)		
DUP_202010080582	13C2-PFDA (S)			120	%	120	(70-130)		
LCS2	13C2-PFDA (S)		100	130	%	130	(70-130)		
MBLK	13C2-PFDA (S)			124	%	124	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	121	%	121	(70-130)		
MS1_202010080581	13C2-PFDA (S)		100	121	%	121	(70-130)		
DUP_202010080582	13C2-PFHxA (S)			123	%	123	(70-130)		
LCS2	13C2-PFHxA (S)		100	130	%	130	(70-130)		
MBLK	13C2-PFHxA (S)			127	%	127	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	121	%	121	(70-130)		
MS1_202010080581	13C2-PFHxA (S)		100	127	%	127	(70-130)		
DUP_202010080582	13C2-PFOA- IS#1 (I)			98.4	%	98	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	98.2	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			99.1	%	99	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
MS1_202010080581	13C2-PFOA- IS#1 (I)		100	99.5	%	100	(50-150)		
DUP_202010080582	13C3-HFPO-DA (S)			118	%	118	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	128	%	128	(70-130)		
MBLK	13C3-HFPO-DA (S)			120	%	121	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	117	%	117	(70-130)		
MS1_202010080581	13C3-HFPO-DA (S)		100	120	%	120	(70-130)		
DUP_202010080582	13C4-PFOS- IS#2 (I)			99.4	%	99	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	97.3	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			99.8	%	100	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.2	%	97	(50-150)		
MS1_202010080581	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
DUP_202010080582	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.023625	0.0280	ug/L				
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00236	ug/L	125	(50-150)		
MS1_202010080581	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0269	ug/L	114	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202010080582	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0233	0.0266	ug/L				
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00217	ug/L	117	(50-150)		
MS1_202010080581	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0259	ug/L	111	(70-130)		
DUP_202010080582	d3-NMeFOSAA (I)			114	%	114	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	115	%	115	(50-150)		
MBLK	d3-NMeFOSAA (I)			109	%	109	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
MS1_202010080581	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
DUP_202010080582	d5-NEtFOSAA (S)			113	%	113	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	116	%	116	(70-130)		
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
MS1_202010080581	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
DUP_202010080582	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0282	ug/L				
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00242	ug/L	121	(50-150)		
MS1_202010080581	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0275	ug/L	110	(70-130)		
DUP_202010080582	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0263	ug/L				
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS1_202010080581	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0261	ug/L	105	(70-130)		
DUP_202010080582	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0273	ug/L				
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00224	ug/L	112	(50-150)		
MS1_202010080581	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0268	ug/L	107	(70-130)		
DUP_202010080582	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.02213	0.0250	ug/L				
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00208	ug/L	118	(50-150)		
MS1_202010080581	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0248	ug/L	112	(70-130)		
DUP_202010080582	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0290	ug/L				
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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 (S) - Indicates surrogate compound.
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Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00246	ug/L	123	(50-150)		
MS1_202010080581	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0286	ug/L	115	(70-130)		
DUP_202010080582	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0292	ug/L				
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00239	ug/L	119	(50-150)		
MS1_202010080581	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0274	ug/L	110	(70-130)		
DUP_202010080582	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0300	ug/L				
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00250	ug/L	125	(50-150)		
MS1_202010080581	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0287	ug/L	115	(70-130)		
DUP_202010080582	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.0228	0.0260	ug/L				
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00215	ug/L	118	(50-150)		
MS1_202010080581	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0256	ug/L	112	(70-130)		
DUP_202010080582	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0287	ug/L				
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00248	ug/L	124	(50-150)		
MS1_202010080581	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0282	ug/L	113	(70-130)		
DUP_202010080582	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0292	ug/L				
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00246	ug/L	123	(50-150)		
MS1_202010080581	Perfluorononanoic acid (PFNA)	ND	0.025	0.0284	ug/L	114	(70-130)		
DUP_202010080582	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.02314	0.0258	ug/L				
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00222	ug/L	120	(50-150)		
MS1_202010080581	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0247	ug/L	107	(70-130)		
DUP_202010080582	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0295	ug/L				
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00257	ug/L	129	(50-150)		
MS1_202010080581	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0292	ug/L	116	(70-130)		
DUP_202010080582	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0305	ug/L				
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00275	ug/L	137	(50-150)		
MS1_202010080581	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0291	ug/L	115	(70-130)		
DUP_202010080582	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0295	ug/L				
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00243	ug/L	122	(50-150)		
MS1_202010080581	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0280	ug/L	112	(70-130)		
DUP_202010080582	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0289	ug/L				
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00238	ug/L	119	(50-150)		
MS1_202010080581	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0277	ug/L	111	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1280374 Analytical Batch: 1281116

Analysis Date: 10/13/2020

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)		
LCS1	13C2-PFDA (S)		100	110	%	110	(70-130)		
LCS1	13C2-PFHxA (S)		100	115	%	115	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	97.0	%	97	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	110	%	110	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	96.3	%	96	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0254	ug/L	108	(70-130)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0241	ug/L	104	(70-130)		
LCS1	d3-NMeFOSAA (I)		100	96.4	%	96	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0259	ug/L	103	(70-130)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0243	ug/L	97	(70-130)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0245	ug/L	98	(70-130)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0235	ug/L	106	(70-130)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0271	ug/L	109	(70-130)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0253	ug/L	101	(70-130)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0281	ug/L	112	(70-130)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0243	ug/L	107	(70-130)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0262	ug/L	105	(70-130)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0273	ug/L	109	(70-130)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0233	ug/L	101	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0275	ug/L	110	(70-130)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0271	ug/L	108	(70-130)		
LCS1	Perfluorotridecanoic acid (PFTTrDA)		0.025	0.0255	ug/L	102	(70-130)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0260	ug/L	104	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1280556 Analytical Batch: 1281194

Analysis Date: 10/13/2020

DUP_202010080594	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0483	ug/L	103	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0481	ug/L	102	(70-130)	30	0.42
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00187	ug/L	100	(50-150)		
MS_202010080593	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00187	ug/L	100	(50-150)		
DUP_202010080594	13C2-PFDA (S)			111	%	111	(70-130)		
LCS3	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFDA (S)		100	108	%	108	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	107	%	107	(70-130)		
MS_202010080593	13C2-PFDA (S)		100	108	%	108	(70-130)		
DUP_202010080594	13C2-PFHxA (S)			113	%	113	(70-130)		
LCS3	13C2-PFHxA (S)		100	114	%	114	(70-130)		
LCS4	13C2-PFHxA (S)		100	110	%	110	(70-130)		
MBLK	13C2-PFHxA (S)			113	%	113	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	108	%	109	(70-130)		
MS_202010080593	13C2-PFHxA (S)		100	109	%	109	(70-130)		
DUP_202010080594	13C2-PFOA- IS#1 (I)			96.4	%	96	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	94.8	%	95	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	94.8	%	95	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			94.4	%	94	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	95.2	%	95	(50-150)		
MS_202010080593	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
DUP_202010080594	13C3-HFPO-DA (S)			110	%	110	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MBLK	13C3-HFPO-DA (S)			110	%	110	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MS_202010080593	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
DUP_202010080594	13C4-PFOS- IS#2 (I)			98.9	%	99	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 897233
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
MS_202010080593	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
DUP_202010080594	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0538	ug/L	111	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0531	ug/L	109	(70-130)	30	1.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00204	ug/L	108	(50-150)		
MS_202010080593	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00214	ug/L	113	(50-150)		
DUP_202010080594	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0498	ug/L	107	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0487	ug/L	104	(70-130)	30	2.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00196	ug/L	105	(50-150)		
MS_202010080593	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00200	ug/L	108	(50-150)		
DUP_202010080594	d3-NMeFOSAA (I)			100	%	100	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	99.8	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			103	%	103	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.0	%	99	(50-150)		
MS_202010080593	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
DUP_202010080594	d5-NEtFOSAA (S)			98.6	%	99	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	91.8	%	92	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	94.3	%	94	(70-130)		
MBLK	d5-NEtFOSAA (S)			96.4	%	96	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	95.3	%	95	(70-130)		
MS_202010080593	d5-NEtFOSAA (S)		100	96.5	%	97	(70-130)		
DUP_202010080594	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0554	ug/L	111	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0555	ug/L	111	(70-130)	30	0.18
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00217	ug/L	108	(50-150)		
MS_202010080593	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00213	ug/L	106	(50-150)		
DUP_202010080594	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0503	ug/L	101	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0513	ug/L	103	(70-130)	30	2.0

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00204	ug/L	102	(50-150)		
MS_202010080593	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00206	ug/L	103	(50-150)		
DUP_202010080594	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0513	ug/L	103	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0517	ug/L	103	(70-130)	30	0.78
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00208	ug/L	104	(50-150)		
MS_202010080593	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00210	ug/L	105	(50-150)		
DUP_202010080594	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0481	ug/L	109	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0475	ug/L	107	(70-130)	30	1.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00190	ug/L	107	(50-150)		
MS_202010080593	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00202	ug/L	114	(50-150)		
DUP_202010080594	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0573	ug/L	115	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0563	ug/L	113	(70-130)	30	1.8
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202010080593	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00217	ug/L	109	(50-150)		
DUP_202010080594	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0554	ug/L	111	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0533	ug/L	107	(70-130)	30	3.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202010080593	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00206	ug/L	103	(50-150)		
DUP_202010080594	Perfluoroheptanoic acid (PFHpA)	0.0033		0.00334	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0580	ug/L	116	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0573	ug/L	115	(70-130)	30	1.2
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00233	ug/L	117	(50-150)		
MS_202010080593	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00363	ug/L	115	(50-150)		
DUP_202010080594	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0503	ug/L	110	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0504	ug/L	111	(70-130)	30	0.20
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00203	ug/L	111	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202010080593	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00202	ug/L	110	(50-150)		
DUP_202010080594	Perfluorohexanoic acid (PFHxA)	0.0066		0.00659	ug/L		(0-30)	30	0.48
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0591	ug/L	118	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0566	ug/L	113	(70-130)	30	4.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202010080593	Perfluorohexanoic acid (PFHxA)	0.0063	0.002	0.00843	ug/L	106	(50-150)		
DUP_202010080594	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0572	ug/L	114	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0561	ug/L	112	(70-130)	30	1.9
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	115	(50-150)		
MS_202010080593	Perfluorononanoic acid (PFNA)	ND	0.002	0.00237	ug/L	118	(50-150)		
DUP_202010080594	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0496	ug/L	107	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0487	ug/L	105	(70-130)	30	1.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00207	ug/L	112	(50-150)		
MS_202010080593	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00197	ug/L	102	(50-150)		
DUP_202010080594	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0582	ug/L	116	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0570	ug/L	114	(70-130)	30	2.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00235	ug/L	117	(50-150)		
MS_202010080593	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00278	ug/L	117	(50-150)		
DUP_202010080594	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0561	ug/L	112	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0550	ug/L	110	(70-130)	30	2.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00251	ug/L	125	(50-150)		
MS_202010080593	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00244	ug/L	108	(50-150)		
DUP_202010080594	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0551	ug/L	110	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0547	ug/L	109	(70-130)	30	0.73
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010080593	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00213	ug/L	107	(50-150)		
DUP_202010080594	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 897233
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0561	ug/L	112	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0535	ug/L	107	(70-130)	30	4.7
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010080593	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00212	ug/L	106	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/14/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows: P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 10/14/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 10/14/2020

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/14/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 898631
Project: 0250000
Group: WRD Pilot [Set #1]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 898631
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **October 15, 2020 at 1649**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202010150620</u>	GAC-1-20201015	10/15/2020 0900
	Static ID: SET A 537.1	
	@537.1	
<u>202010150621</u>	GAC-2-20201015	10/15/2020 0903
	@537.1	
<u>202010150622</u>	GAC-3-20201015	10/15/2020 0906
	@537.1	
<u>202010150623</u>	GAC-4-20201015	10/15/2020 0909
	@537.1	
<u>202010150624</u>	IX-1-20201015	10/15/2020 0912
	@537.1	
<u>202010150625</u>	IX-2-20201015	10/15/2020 0915
	@537.1	
<u>202010150626</u>	IX-3-20201015	10/15/2020 0918
	@537.1	
<u>202010150627</u>	IX-4-20201015	10/15/2020 0921
	@537.1	
<u>202010150628</u>	LH-INF-20201015	10/15/2020 0950
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Calcium Total ICAP
	Hexavalent chromium(Dissolved)	Iron Total ICAP
	Magnesium Total ICAP	Manganese Total ICAP/MS
	Oil and Grease by 1664(subbed)	Potassium Total ICAP
	Perchlorate	Sodium Total ICAP
	Sulfate	Total Dissolved Solid (TDS)
	Total Hardness as CaCO3 by ICP	Total Organic Carbon
	Total Suspended Solids (TSS)	Uranium by ICPMS as pCi/L
	Uranium ICAP/MS	
<u>202010150629</u>	GAC-5-20201015	10/15/2020 1525
	@537.1	
<u>202010150630</u>	GAC-6-20201015	10/15/2020 1528

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 898631
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **October 15, 2020 at 1649**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202010150631	GAC-7-20201015	10/15/2020 1531
	@537.1	
202010150632	GAC-8-20201015	10/15/2020 1534
	@537.1	
202010150633	IX-5M-20201015	10/15/2020 1601
	@537.1	
202010150634	IX-6M-20201015	10/15/2020 1604
	@537.1	
202010150635	IX-7M-20201015	10/15/2020 1607
	@537.1	
202010150636	IX-8M-20201015	10/15/2020 1610
	@537.1	
202010150695	GAC-1M-20201015 Static ID: 537.1	10/15/2020 0924
	@537.1	
202010150696	GAC-2M-20201015 Static ID: 537.1	10/15/2020 0927
	@537.1	
202010150697	GAC-3M-20201015 Static ID: 537.1	10/15/2020 0930
	@537.1	
202010150698	GAC-4M-20201015 Static ID: 537.1	10/15/2020 0933
	@537.1	
202010150699	IX-1M-20201015 Static ID: 537.1	10/15/2020 0936
	@537.1	
202010150700	IX-2M-20201015	10/15/2020 0939

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 898631
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **October 15, 2020 at 1649**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	Static ID: 537.1	
	@537.1	
<u>202010150701</u>	IX-3M-20201015	10/15/2020 0942
	Static ID: 537.1	
	@537.1	
<u>202010150702</u>	IX-4M-20201015	10/15/2020 0945
	Static ID: 537.1	
	@537.1	
<u>202010150703</u>	GAC-5M-20201015	10/15/2020 1549
	@537.1	
<u>202010150704</u>	GAC-6M-20201015	10/15/2020 1552
	@537.1	
<u>202010150705</u>	GAC-7M-20201015	10/15/2020 1555
	@537.1	
<u>202010150706</u>	GAC-8M-20201015	10/15/2020 1558
	@537.1	
<u>202010150707</u>	IX-5-20201015	10/15/2020 1537
	@537.1	
<u>202010150708</u>	IX-6-20201015	10/15/2020 1540
	@537.1	
<u>202010150709</u>	IX-7-20201015	10/15/2020 1543
	@537.1	
<u>202010150710</u>	IX-8-20201015	10/15/2020 1546
	@537.1	
<u>202010150711</u>	MB-INF-20201015	10/15/2020 1620

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 898631
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **October 15, 2020 at 1649**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@ICPMS Uranium by ICPMS as pCi/L	@537.1
	@ANIONS48 Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Calcium Total ICAP Chloride	Hexavalent chromium(Dissolved)
	Iron Total ICAP Magnesium Total ICAP	Manganese Total ICAP/MS
	Oil and Grease by 1664(subbed) Perchlorate	Potassium Total ICAP
	Sodium Total ICAP Sulfate	Total Dissolved Solid (TDS)
	Total Hardness as CaCO3 by ICP Total Organic Carbon	Total Suspended Solids (TSS)

Test Description

- @ICPMS -- ICPMS Metals
- @537.1 -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0
- @VOASDWA -- Volatile Organics by GCMS



898631

FROM: GSI Environmental Inc.
 19200 Von Karman Ave, Suite 800
 Irvine, CA 92612
 (949) 679-1070

PROJECT NAME: WRD Pilot
 PROJECT CONTACT: Miae Jeon
 GLOBAL ID:

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com
 LABORATORY: Eurofins Eaton Analytical

PROJECT NO.: 5302
 LAB CONTACT: Sophia Liang
 SAMPLER(S): (PRINT) BC

TURNAROUND TIME: SAME DAY 24 HR 48 HR
 72 HR 5 DAYS STANDARD

SPECIAL INSTRUCTIONS:
 Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com,
 & rdtorres@gsi-net.com;
 Provide EDD of sample results

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Preservation			Field Filtered	REQUESTED ANALYSES											Time:																	
		DATE	TIME			Unpreserved	Preserved	PFAS - full list (EPA 537.1)		Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)		Oil & Grease (EPA 1664)																
	GAC-1-20201015	10/15/20	09:00	Water	2	2		X																														
	GAC-2-20201015		0903	Water				X																														
	GAC-3-20201015		0906	Water				X																														
	GAC-4-20201015		0909	Water				X																														
	IX-1-20201015		0912	Water				X																														
	IX-2-20201015		0915	Water				X																														
	IX-3-20201015		0918	Water				X																														
	IX-4-20201015		0921	Water				X																														
	LH-INF-20201015		0950	Water	14	4	10	X	X																													
	LH-INF-DUP			Water																																		
	GAC-5-20201015	10/15/20	1525	Water	2	2		X																														
	GAC-6-20201015		1528	Water				X																														
	GAC-7-20201015		1531	Water				X																														
	GAC-8-20201015		1539	Water				X																														

Received by: (Signature) [Signature] Date: 10/15/20 Time: 16:49
 Relinquished by: (Signature) [Signature] Date: 10/15/20 Time: 16:49
 Relinquished by: (Signature) [Signature] Date: 10/15/20 Time: 16:49

898031

FROM: GSI Environmental Inc.
19200 Von Karman Ave, Suite 800
Irvine, CA 92612
(949) 679-1070

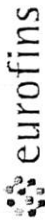
PROJECT NAME: WRD Pilot
PROJECT NO.: 5302
PROJECT CONTACT: Miae Jeon
LAB CONTACT: Sophia Liang
GLOBAL ID:
E-MAIL: mjeon@gsi-net.com
LABORATORY: Eurofins Eaton Analytical
SAMPLER(S) (PRINT) BC

TEL: (949) 679-1070

TURNAROUND TIME:
 SAME DAY
 24 HR
 48 HR
 72 HR
 5 DAYS
 STANDARD

SPECIAL INSTRUCTIONS:
 Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com,
 & rdlorres@gsi-net.com;
 Provide EDD of sample results

LAB USE ONLY	SAMPLE ID	DATE		MATRIX	NO. OF CONT.	PRESERVATION			REQUESTED ANALYSES				Date:	Time:	
		SAMPLING	TIME			Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO ₃), Chloride (EPA 300.0)	Alkalinity (as CaCO ₃), (SM 2320B)	TOC (SM 5310C)			
	IX-5M-20201015	10/15/20	1601	Water	2		X								
	IX-6M-20201015		1604	Water			X								
	IX-7M-20201015		1607	Water			X								
	IX-8M-20201015		1610	Water			X								
	MB-INF			Water			X								
	MB-INF-DUP			Water			X								
	FB			Water			X								
Relinquished by: (Signature)						Received by: (Signature)						Date:	Time:		
												16/15/20	1649		
Relinquished by: (Signature)						Received by: (Signature)						Date:	Time:		
												16/15/20	1649		
Relinquished by: (Signature)						Received by: (Signature)						Date:	Time:		
												16/15/20	1649		



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 898631

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 668A (Observation = 20.5 °C) (Corr. Factor = 0 °C) (Final = 20.3 °C)

TYPE OF ICE: Real Synthetic No Ice Condition of Ice: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	2 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)
3 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	4 = (Observation= _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

- 5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____
- 6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date _____ Results _____

7) VOA and Radon Headspace:

No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6261,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm	None/<6 mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: [Signature] PRINT NAME: [Signature] COMPANY/TITLE: Eurofins Eaton Analytical DATE: 10/15/20 TIME: 16:49

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 898631
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944

Flags Legend:

Q2 - Sample received with head space.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202010150624	<u>IX-1-20201015</u>				
10/19/2020 14:58	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
10/19/2020 14:58	Perfluorooctanoic acid (PFOA)		0.0028		ug/L	0.0020
	202010150625	<u>IX-2-20201015</u>				
10/19/2020 15:08	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
	202010150626	<u>IX-3-20201015</u>				
10/19/2020 15:17	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
	202010150627	<u>IX-4-20201015</u>				
10/19/2020 15:27	Perfluorohexanoic acid (PFHxA)		0.0044		ug/L	0.0020
	202010150628	<u>LH-INF-20201015</u>				
10/16/2020 21:36	Alkalinity in CaCO3 units		200		mg/L	2.0
10/17/2020 15:09	Arsenic Total ICAP/MS		2.8	10	ug/L	1.0
10/20/2020 13:06	Calcium Total ICAP		110		mg/L	1.0
10/15/2020 21:01	Chloride		110	250	mg/L	2.5
10/21/2020 15:56	Chloroform (Trichloromethane)		0.62		ug/L	0.50
10/23/2020 13:13	Hexavalent chromium(Dissolved)		0.65		ug/L	0.020
10/20/2020 13:06	Magnesium Total ICAP		21		mg/L	0.10
10/15/2020 21:01	Nitrate as Nitrogen by IC		3.0	10	mg/L	0.50
10/15/2020 21:01	Nitrate as NO3 (calc)		13	45	mg/L	2.2
10/19/2020 15:37	Perfluorobutanesulfonic acid (PFBS)		0.0067		ug/L	0.0020
10/19/2020 15:37	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
10/19/2020 15:37	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
10/19/2020 15:37	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
10/19/2020 15:37	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
10/19/2020 15:37	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
10/19/2020 15:37	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
10/20/2020 13:06	Potassium Total ICAP		4.7		mg/L	1.0
10/20/2020 13:06	Sodium Total ICAP		69		mg/L	1.0
10/15/2020 21:01	Sulfate		180	250	mg/L	2.5
10/19/2020 22:21	Total Dissolved Solids (TDS)		680	500	mg/L	10
10/20/2020 17:11	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
10/15/2020 21:01	Total Nitrate, Nitrite-N, CALC		3.0		mg/L	0.10
10/28/2020 06:58	Total Organic Carbon		0.81		mg/L	0.20
10/21/2020 15:56	Total THM		0.62	80	ug/L	0.50
10/17/2020 15:59	Uranium by ICPMS as pCi/L		3.7		pCi/L	0.70

SUMMARY OF POSITIVE DATA ONLY

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/17/2020 15:09	Uranium ICAP/MS		5.5	30	ug/L	1.0
	202010150629	<u>GAC-5-20201015</u>				
10/19/2020 15:56	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
10/19/2020 15:56	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
10/19/2020 15:56	Perfluorohexanesulfonic acid (PFHxS)		0.0021		ug/L	0.0020
10/19/2020 15:56	Perfluorohexanoic acid (PFHxA)		0.0073		ug/L	0.0020
10/19/2020 15:56	Perfluorooctanesulfonic acid (PFOS)		0.0048		ug/L	0.0020
10/19/2020 15:56	Perfluorooctanoic acid (PFOA)		0.0076		ug/L	0.0020
	202010150630	<u>GAC-6-20201015</u>				
10/19/2020 16:05	Perfluorobutanesulfonic acid (PFBS)		0.014		ug/L	0.0020
10/19/2020 16:05	Perfluorohexanoic acid (PFHxA)		0.0092		ug/L	0.0020
	202010150631	<u>GAC-7-20201015</u>				
10/19/2020 16:15	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
10/19/2020 16:15	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
10/19/2020 16:15	Perfluorohexanoic acid (PFHxA)		0.0078		ug/L	0.0020
10/19/2020 16:15	Perfluorooctanoic acid (PFOA)		0.0034		ug/L	0.0020
	202010150632	<u>GAC-8-20201015</u>				
10/19/2020 16:24	Perfluorobutanesulfonic acid (PFBS)		0.0037		ug/L	0.0020
10/19/2020 16:24	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
	202010150633	<u>IX-5M-20201015</u>				
10/19/2020 16:34	Perfluorobutanesulfonic acid (PFBS)		0.0021		ug/L	0.0020
10/19/2020 16:34	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
10/19/2020 16:34	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
10/19/2020 16:34	Perfluorooctanesulfonic acid (PFOS)		0.0034		ug/L	0.0020
10/19/2020 16:34	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
	202010150634	<u>IX-6M-20201015</u>				
10/19/2020 16:43	Perfluorobutanesulfonic acid (PFBS)		0.0021		ug/L	0.0020
10/19/2020 16:43	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
10/19/2020 16:43	Perfluorohexanoic acid (PFHxA)		0.0059		ug/L	0.0020
10/19/2020 16:43	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
	202010150635	<u>IX-7M-20201015</u>				
10/19/2020 16:53	Perfluorobutanesulfonic acid (PFBS)		0.0043		ug/L	0.0020
10/19/2020 16:53	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
10/19/2020 16:53	Perfluorohexanoic acid (PFHxA)		0.0067		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/19/2020 16:53	Perfluorooctanesulfonic acid (PFOS)		0.0021		ug/L	0.0020
10/19/2020 16:53	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		202010150636 IX-8M-20201015				
10/19/2020 17:03	Perfluorobutanesulfonic acid (PFBS)		0.0038		ug/L	0.0020
10/19/2020 17:03	Perfluoroheptanoic acid (PFHpA)		0.0050		ug/L	0.0020
10/19/2020 17:03	Perfluorohexanoic acid (PFHxA)		0.0075		ug/L	0.0020
10/19/2020 17:03	Perfluorononanoic acid (PFNA)		0.0024		ug/L	0.0020
10/19/2020 17:03	Perfluorooctanesulfonic acid (PFOS)		0.0020		ug/L	0.0020
10/19/2020 17:03	Perfluorooctanoic acid (PFOA)		0.017		ug/L	0.0020
		202010150695 GAC-1M-20201015				
10/19/2020 17:12	Perfluorobutanesulfonic acid (PFBS)		0.0032		ug/L	0.0020
10/19/2020 17:12	Perfluorohexanoic acid (PFHxA)		0.0026		ug/L	0.0020
10/19/2020 17:12	Perfluorooctanesulfonic acid (PFOS)		0.0026		ug/L	0.0020
10/19/2020 17:12	Perfluorooctanoic acid (PFOA)		0.0036		ug/L	0.0020
		202010150696 GAC-2M-20201015				
10/20/2020 04:37	Perfluorobutanesulfonic acid (PFBS)		0.0041		ug/L	0.0020
10/20/2020 04:37	Perfluorohexanoic acid (PFHxA)		0.0025		ug/L	0.0020
		202010150697 GAC-3M-20201015				
10/19/2020 17:22	Perfluorobutanesulfonic acid (PFBS)		0.0043		ug/L	0.0020
10/19/2020 17:22	Perfluorohexanoic acid (PFHxA)		0.0028		ug/L	0.0020
		202010150699 IX-1M-20201015				
10/20/2020 04:56	Perfluorohexanoic acid (PFHxA)		0.0024		ug/L	0.0020
10/20/2020 04:56	Perfluorooctanesulfonic acid (PFOS)		0.0037		ug/L	0.0020
10/20/2020 04:56	Perfluorooctanoic acid (PFOA)		0.0063		ug/L	0.0020
		202010150700 IX-2M-20201015				
10/20/2020 05:05	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
10/20/2020 05:05	Perfluorooctanoic acid (PFOA)		0.0086		ug/L	0.0020
		202010150701 IX-3M-20201015				
10/20/2020 05:15	Perfluorobutanesulfonic acid (PFBS)		0.0031		ug/L	0.0020
10/20/2020 05:15	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
10/20/2020 05:15	Perfluorooctanoic acid (PFOA)		0.0098		ug/L	0.0020
		202010150702 IX-4M-20201015				
10/20/2020 05:36	Perfluorobutanesulfonic acid (PFBS)		0.0027		ug/L	0.0020
10/20/2020 05:36	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/20/2020 05:36	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
10/20/2020 05:36	Perfluorooctanesulfonic acid (PFOS)		0.0020		ug/L	0.0020
10/20/2020 05:36	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
		202010150703 <u>GAC-5M-20201015</u>				
10/20/2020 05:46	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
10/20/2020 05:46	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
10/20/2020 05:46	Perfluorohexanesulfonic acid (PFHxS)		0.0043		ug/L	0.0020
10/20/2020 05:46	Perfluorohexanoic acid (PFHxA)		0.0080		ug/L	0.0020
10/20/2020 05:46	Perfluorononanoic acid (PFNA)		0.0022		ug/L	0.0020
10/20/2020 05:46	Perfluorooctanesulfonic acid (PFOS)		0.017		ug/L	0.0020
10/20/2020 05:46	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
		202010150704 <u>GAC-6M-20201015</u>				
10/20/2020 05:56	Perfluorobutanesulfonic acid (PFBS)		0.013		ug/L	0.0020
10/20/2020 05:56	Perfluoroheptanoic acid (PFHpA)		0.0050		ug/L	0.0020
10/20/2020 05:56	Perfluorohexanesulfonic acid (PFHxS)		0.0044		ug/L	0.0020
10/20/2020 05:56	Perfluorohexanoic acid (PFHxA)		0.0085		ug/L	0.0020
10/20/2020 05:56	Perfluorooctanesulfonic acid (PFOS)		0.0037		ug/L	0.0020
10/20/2020 05:56	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		202010150705 <u>GAC-7M-20201015</u>				
10/20/2020 06:06	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
10/20/2020 06:06	Perfluoroheptanoic acid (PFHpA)		0.0044		ug/L	0.0020
10/20/2020 06:06	Perfluorohexanesulfonic acid (PFHxS)		0.0052		ug/L	0.0020
10/20/2020 06:06	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
10/20/2020 06:06	Perfluorononanoic acid (PFNA)		0.0021		ug/L	0.0020
10/20/2020 06:06	Perfluorooctanesulfonic acid (PFOS)		0.015		ug/L	0.0020
10/20/2020 06:06	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
		202010150706 <u>GAC-8M-20201015</u>				
10/20/2020 06:15	Perfluorobutanesulfonic acid (PFBS)		0.0086		ug/L	0.0020
10/20/2020 06:15	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
10/20/2020 06:15	Perfluorohexanesulfonic acid (PFHxS)		0.0030		ug/L	0.0020
10/20/2020 06:15	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
10/20/2020 06:15	Perfluorooctanesulfonic acid (PFOS)		0.010		ug/L	0.0020
10/20/2020 06:15	Perfluorooctanoic acid (PFOA)		0.0089		ug/L	0.0020
		202010150707 <u>IX-5-20201015</u>				
10/20/2020 06:25	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

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 1 800 566 LABS (1 800 566 5227)

Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/20/2020 06:25	Perfluorooctanoic acid (PFOA)		0.0021		ug/L	0.0020
	202010150708	<u>IX-6-20201015</u>				
10/20/2020 06:34	Perfluorohexanoic acid (PFHxA)		0.0059		ug/L	0.0020
	202010150709	<u>IX-7-20201015</u>				
10/20/2020 06:44	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
10/20/2020 06:44	Perfluorohexanoic acid (PFHxA)		0.0070		ug/L	0.0020
10/20/2020 06:44	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
	202010150710	<u>IX-8-20201015</u>				
10/20/2020 06:53	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
10/20/2020 06:53	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
	202010150711	<u>MB-INF-20201015</u>				
10/16/2020 21:12	Alkalinity in CaCO3 units		160		mg/L	2.0
10/17/2020 15:15	Arsenic Total ICAP/MS		1.4	10	ug/L	1.0
10/20/2020 13:09	Calcium Total ICAP		61		mg/L	1.0
10/15/2020 20:22	Chloride		50	250	mg/L	2.5
10/23/2020 13:23	Hexavalent chromium(Dissolved)		0.44		ug/L	0.020
10/20/2020 13:09	Magnesium Total ICAP		12		mg/L	0.10
10/15/2020 20:22	Nitrate as Nitrogen by IC		2.7	10	mg/L	0.50
10/15/2020 20:22	Nitrate as NO3 (calc)		12	45	mg/L	2.2
10/22/2020 18:36	Oil and Grease by 1664(subbed)		1.88		mg/L	1
10/20/2020 07:03	Perfluorobutanesulfonic acid (PFBS)		0.0096		ug/L	0.0020
10/20/2020 07:03	Perfluorodecanoic acid (PFDA)		0.0021		ug/L	0.0020
10/20/2020 07:03	Perfluoroheptanoic acid (PFHpA)		0.0044		ug/L	0.0020
10/20/2020 07:03	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
10/20/2020 07:03	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
10/20/2020 07:03	Perfluorononanoic acid (PFNA)		0.0038		ug/L	0.0020
10/20/2020 07:03	Perfluorooctanesulfonic acid (PFOS)		0.039		ug/L	0.0020
10/20/2020 07:03	Perfluorooctanoic acid (PFOA)		0.017		ug/L	0.0020
10/20/2020 13:09	Potassium Total ICAP		4.0		mg/L	1.0
10/20/2020 13:09	Sodium Total ICAP		52		mg/L	1.0
10/15/2020 20:22	Sulfate		77	250	mg/L	2.5
10/19/2020 22:22	Total Dissolved Solids (TDS)		400	500	mg/L	10
10/20/2020 17:11	Total Hardness as CaCO3 by ICP (calc)		200		mg/L	3.0
10/15/2020 20:22	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
10/28/2020 07:15	Total Organic Carbon		0.89		mg/L	0.20
10/17/2020 15:59	Uranium by ICPMS as pCi/L		1.3		pCi/L	0.70

SUMMARY OF POSITIVE DATA ONLY

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Report: 898631
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Samples Received on:
10/15/2020 1649

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/17/2020 15:15	Uranium ICAP/MS		2.0	30	ug/L	1.0

Tel: (626) 386-1100
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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20201015 (202010150620)					Sampled on 10/15/2020 0900				
Static ID: SET A 537.1									
EPA 537.1 - EPA Method 537.1									
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	13C2-PFDA	102	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	13C2-PFHxA	105	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	98	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 13:51	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	94	%		1

GAC-2-20201015 (202010150621)					Sampled on 10/15/2020 0903				
EPA 537.1 - EPA Method 537.1									
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	13C2-PFDA	106	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	13C2-PFHxA	112	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	104	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 14:39	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	93	%		1

GAC-3-20201015 (202010150622)

Sampled on 10/15/2020 0906

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	4,8-dioxo-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	13C2-PFDA	113	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	13C2-PFHxA	123	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	112	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/16/20	10/19/20 14:49	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	106	%		1

GAC-4-20201015 (202010150623)

Sampled on 10/15/2020 0909

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	13C2-PFDA	105	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	13C2-PFHxA	112	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	103	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	97	%		1
10/16/20	10/19/20 14:10	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	94	%		1

IX-1-20201015 (202010150624)

Sampled on 10/15/2020 0912

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0028	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	13C2-PFDA	112	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	13C2-PFHxA	121	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	110	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/16/20	10/19/20 14:58	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	103	%		1

IX-2-20201015 (202010150625)

Sampled on 10/15/2020 0915

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	13C2-PFDA	102	%		1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	13C2-PFHxA	108	%		1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	101	%		1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	97	%		1

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 15:08	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	94	%		1
IX-3-20201015 (202010150626)					Sampled on 10/15/2020 0918				
EPA 537.1 - EPA Method 537.1									
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	13C2-PFDA	109	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	13C2-PFHxA	117	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	110	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/16/20	10/19/20 15:17	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	102	%		1

IX-4-20201015 (202010150627)

Sampled on 10/15/2020 0921

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0044	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	13C2-PFDA	105	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	13C2-PFHxA	119	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	109	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 15:27	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	89	%		1

LH-INF-20201015 (202010150628)

Sampled on 10/15/2020 0950

EPA 200.8 - ICPMS Metals

10/16/20	10/17/20 15:09	1281647	1281906	(EPA 200.8)	Arsenic Total ICAP/MS	2.8	ug/L	1.0	1
10/16/20	10/17/20 15:09	1281647	1281906	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
10/16/20	10/17/20 15:09	1281647	1281906	(EPA 200.8)	Uranium ICAP/MS	5.5	ug/L	1.0	1

EPA 200.7 - ICP Metals

10/16/20	10/20/20 13:06	1281647	1282435	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
10/16/20	10/20/20 13:06	1281647	1282435	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
10/16/20	10/20/20 13:06	1281647	1282435	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
10/16/20	10/20/20 13:06	1281647	1282435	(EPA 200.7)	Potassium Total ICAP	4.7	mg/L	1.0	1
10/16/20	10/20/20 13:06	1281647	1282435	(EPA 200.7)	Sodium Total ICAP	69	mg/L	1.0	1

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
SM 5310C - Total Organic Carbon									
	10/28/20 06:58		1284012	(SM 5310C)	Total Organic Carbon	0.81	mg/L	0.20	1
EPA 200.8 - Uranium by ICPMS as pCi/L									
	10/17/20 15:59			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.7 (c)	pCi/L	0.70	1
SM 2340B - Total Hardness as CaCO3 by ICP									
	10/20/20 17:11			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
	10/23/20 13:13		1283454	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.65	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	10/15/20 21:01		1281618	(EPA 300.0)	Nitrate as Nitrogen by IC	3.0	mg/L	0.50	5
	10/15/20 21:01		1281618	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
	10/15/20 21:01		1281618	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	10/15/20 21:01		1281618	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	3.0	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	10/15/20 21:01		1281621	(EPA 300.0)	Chloride	110	mg/L	2.5	5
	10/15/20 21:01		1281621	(EPA 300.0)	Sulfate	180	mg/L	2.5	5
EPA 314.0 - Perchlorate									
	10/21/20 19:46	(1)	1281864	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0067	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1

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10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	13C2-PFDA	114	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	13C2-PFHxA	123	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	112	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 15:37	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	104	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	10/20/20 17:25			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.98	1
EPA 524.2 - Volatile Organics by GCMS									
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1,1-Trichloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1,2-Trichloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1-Dichloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1-Dichloroethylene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,1-Dichloropropene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2,3-Trichloropropane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2,4-Trichlorobenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2,4-Trimethylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2-Dichloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2-Dichloropropane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,3,5-Trimethylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,3-Dichloropropane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	2,2-Dichloropropane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	2-Butanone (MEK)	ND (Q2)	ug/L	5.0	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND (Q2)	ug/L	5.0	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Benzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromobenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromochloromethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromodichloromethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromoethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromoform	ND (Q2)	ug/L	0.50	1

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10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Carbon disulfide	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Carbon Tetrachloride	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Chlorobenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Chlorodibromomethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Chloroethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Chloroform (Trichloromethane)	0.62 (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	cis-1,2-Dichloroethylene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	cis-1,3-Dichloropropene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Dibromomethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Dichlorodifluoromethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Dichloromethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Di-isopropyl ether	ND (Q2)	ug/L	3.0	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Ethyl benzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Hexachlorobutadiene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Isopropylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	m,p-Xylenes	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Naphthalene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	n-Butylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	n-Propylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	o-Chlorotoluene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	o-Xylene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	p-Chlorotoluene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	p-Isopropyltoluene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	sec-Butylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Styrene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	tert-amyl Methyl Ether	ND (Q2)	ug/L	3.0	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	tert-Butyl Ethyl Ether	ND (Q2)	ug/L	3.0	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	tert-Butylbenzene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Tetrachloroethylene (PCE)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Toluene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1

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10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Total THM	0.62	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	trans-1,2-Dichloroethylene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	trans-1,3-Dichloropropene	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Trichloroethylene (TCE)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Trichlorofluoromethane	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND (Q2)	ug/L	0.50	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Vinyl chloride (VC)	ND (Q2)	ug/L	0.30	1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	1,2-Dichloroethane-d4	113	%		1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	4-Bromofluorobenzene	95	%		1
10/21/20	10/21/20 15:56	1282988	1282994	(EPA 524.2)	Toluene-d8	94	%		1
SM 2320B - Alkalinity in CaCO3 units									
	10/16/20 21:36		1282170	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
10/16/20	10/19/20 22:21	1282296	1282294	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	680	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	10/19/20 17:52		1282304	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
GAC-5-20201015 (202010150629)					Sampled on 10/15/2020 1525				
EPA 537.1 - EPA Method 537.1									
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0021	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0073	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0048	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0076	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	13C2-PFDA	104	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	13C2-PFHxA	111	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	89	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 15:56	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	95	%		1

GAC-6-20201015 (202010150630)

Sampled on 10/15/2020 1528

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.014	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0092	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	13C2-PFDA	108	%		1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	13C2-PFHxA	115	%		1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/16/20	10/19/20 16:05	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-7-20201015 (202010150631)

Sampled on 10/15/2020 1531

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0078	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0034	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	13C2-PFDA	108	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	13C2-PFHxA	118	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	94	%		1
10/16/20	10/19/20 16:15	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	100	%		1

GAC-8-20201015 (202010150632)

Sampled on 10/15/2020 1534

EPA 537.1 - EPA Method 537.1

Rounding on totals after summation.
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0037	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	13C2-PFDA	103	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	13C2-PFHxA	111	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	103	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	94	%		1
10/16/20	10/19/20 16:24	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	94	%		1

IX-5M-20201015 (202010150633)

Sampled on 10/15/2020 1601

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0021	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0034	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	13C2-PFDA	105	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	13C2-PFHxA	114	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/16/20	10/19/20 16:34	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	95	%		1

IX-6M-20201015 (202010150634)

Sampled on 10/15/2020 1604

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0021	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

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Report: 898631
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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0059	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	13C2-PFDA	104	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	13C2-PFHxA	111	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/16/20	10/19/20 16:43	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	93	%		1

IX-7M-20201015 (202010150635)

Sampled on 10/15/2020 1607

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0043	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0067	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0021	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	13C2-PFDA	107	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	13C2-PFHxA	117	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 16:53	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	101	%		1

IX-8M-20201015 (202010150636)

Sampled on 10/15/2020 1610

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0038	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0050	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0075	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0024	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0020	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.017	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	13C2-PFDA	109	%		1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	13C2-PFHxA	116	%		1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1

Rounding on totals after summation.
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/16/20	10/19/20 17:03	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	102	%		1

GAC-1M-20201015 (202010150695)

Sampled on 10/15/2020 0924

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0032	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0026	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0026	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0036	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	13C2-PFDA	104	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	13C2-PFHxA	114	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	103	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/16/20	10/19/20 17:12	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-2M-20201015 (202010150696)

Sampled on 10/15/2020 0927

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

Rounding on totals after summation.
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0041	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0025	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	13C2-PFDA	106	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	13C2-PFHxA	107	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	106	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	104	%		1
10/19/20	10/20/20 04:37	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	91	%		1

GAC-3M-20201015 (202010150697)

Sampled on 10/15/2020 0930

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.
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Report: 898631
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Water Replenishment District
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Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0043	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0028	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	13C2-PFDA	102	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	13C2-PFHxA	108	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	13C3-HFPO-DA	100	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	13C4-PFOS- IS#2	89	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	d3-NMeFOSAA	96	%		1
10/16/20	10/19/20 17:22	1281815	1282526	(EPA 537.1)	d5-NEtFOSAA	95	%		1

GAC-4M-20201015 (202010150698)

Sampled on 10/15/2020 0933

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	13C2-PFDA	105	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	13C2-PFHxA	110	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	108	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/19/20	10/20/20 04:46	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	86	%		1

IX-1M-20201015 (202010150699)

Sampled on 10/15/2020 0936

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0037	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0063	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	13C2-PFDA	107	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	13C2-PFHxA	108	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	108	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/19/20	10/20/20 04:56	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	90	%		1

IX-2M-20201015 (202010150700)

Sampled on 10/15/2020 0939

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0086	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	13C2-PFDA	118	%		1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	13C2-PFHxA	122	%		1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	119	%		1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/19/20	10/20/20 05:05	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	102	%		1

IX-3M-20201015 (202010150701)

Sampled on 10/15/2020 0942

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0031	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0098	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	13C2-PFDA	104	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	13C2-PFHxA	104	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	103	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/19/20	10/20/20 05:15	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	95	%		1

IX-4M-20201015 (202010150702)

Sampled on 10/15/2020 0945

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0027	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0020	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	13C2-PFDA	107	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	13C2-PFHxA	109	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	102	%		1
10/19/20	10/20/20 05:36	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	91	%		1

GAC-5M-20201015 (202010150703)

Sampled on 10/15/2020 1549

EPA 537.1 - EPA Method 537.1

10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0043	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0080	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0022	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.017	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	13C2-PFDA	105	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	13C2-PFHxA	107	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/19/20	10/20/20 05:46	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	90	%		1

GAC-6M-20201015 (202010150704)

Sampled on 10/15/2020 1552

EPA 537.1 - EPA Method 537.1

10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.013	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0050	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0044	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0085	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0037	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	13C2-PFDA	106	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	13C2-PFHxA	105	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/19/20	10/20/20 05:56	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	92	%		1

GAC-7M-20201015 (202010150705)

Sampled on 10/15/2020 1555

EPA 537.1 - EPA Method 537.1

10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0044	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0052	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0021	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.015	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	13C2-PFDA	104	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	13C2-PFHxA	107	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/19/20	10/20/20 06:06	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	94	%		1

GAC-8M-20201015 (202010150706)

Sampled on 10/15/2020 1558

EPA 537.1 - EPA Method 537.1

10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0086	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0030	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.010	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0089	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	13C2-PFDA	107	%		1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	13C2-PFHxA	107	%		1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1

Rounding on totals after summation.
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	106	%		1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	97	%		1
10/19/20	10/20/20 06:15	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	88	%		1

IX-5-20201015 (202010150707)

Sampled on 10/15/2020 1537

EPA 537.1 - EPA Method 537.1

10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0021	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	13C2-PFDA	104	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	13C2-PFHxA	107	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	106	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	101	%		1
10/19/20	10/20/20 06:25	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	90	%		1

IX-6-20201015 (202010150708)

Sampled on 10/15/2020 1540

EPA 537.1 - EPA Method 537.1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0059	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	13C2-PFDA	106	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	13C2-PFHxA	109	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	106	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	99	%		1
10/19/20	10/20/20 06:34	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	91	%		1

IX-7-20201015 (202010150709)

Sampled on 10/15/2020 1543

EPA 537.1 - EPA Method 537.1

10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1

Rounding on totals after summation.
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0070	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	13C2-PFDA	105	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	13C2-PFHxA	110	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	107	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	100	%		1
10/19/20	10/20/20 06:44	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	93	%		1

IX-8-20201015 (202010150710)

Sampled on 10/15/2020 1546

EPA 537.1 - EPA Method 537.1

10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	13C2-PFDA	101	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	13C2-PFHxA	111	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	105	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	98	%		1
10/19/20	10/20/20 06:53	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	89	%		1

MB-INF-20201015 (202010150711)

Sampled on 10/15/2020 1620

EPA 200.8 - ICPMS Metals

10/16/20	10/17/20 15:15	1281647	1281906	(EPA 200.8)	Arsenic Total ICAP/MS	1.4	ug/L	1.0	1
10/16/20	10/17/20 15:15	1281647	1281906	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
10/16/20	10/17/20 15:15	1281647	1281906	(EPA 200.8)	Uranium ICAP/MS	2.0	ug/L	1.0	1

EPA 200.7 - ICP Metals

10/16/20	10/20/20 13:09	1281647	1282435	(EPA 200.7)	Calcium Total ICAP	61	mg/L	1.0	1
10/16/20	10/20/20 13:09	1281647	1282435	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
10/16/20	10/20/20 13:09	1281647	1282435	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1
10/16/20	10/20/20 13:09	1281647	1282435	(EPA 200.7)	Potassium Total ICAP	4.0	mg/L	1.0	1
10/16/20	10/20/20 13:09	1281647	1282435	(EPA 200.7)	Sodium Total ICAP	52	mg/L	1.0	1

SM 5310C - Total Organic Carbon

10/28/20 07:15			1284012	(SM 5310C)	Total Organic Carbon	0.89	mg/L	0.20	1
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EPA 200.8 - Uranium by ICPMS as pCi/L

10/17/20 15:59				(EPA 200.8)	Uranium by ICPMS as pCi/L	1.3 (c)	pCi/L	0.70	1
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SM 2340B - Total Hardness as CaCO3 by ICP

10/20/20 17:11				(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	200 (c)	mg/L	3.0	1
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EPA 218.6 - Hexavalent chromium(Dissolved)

10/23/20 13:23			1283454	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.44	ug/L	0.020	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

Rounding on totals after summation.
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	10/15/20 20:22		1281618	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	0.50	5
	10/15/20 20:22		1281618	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
	10/15/20 20:22		1281618	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	10/15/20 20:22		1281618	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	10/15/20 20:22		1281621	(EPA 300.0)	Chloride	50	mg/L	2.5	5
	10/15/20 20:22		1281621	(EPA 300.0)	Sulfate	77	mg/L	2.5	5
EPA 314.0 - Perchlorate									
	10/21/20 20:10	(1)	1281864	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0096	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0021	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0044	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0038	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.039	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.017	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	13C2-PFDA	102	%		1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	13C2-PFHxA	109	%		1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	13C3-HFPO-DA	109	%		1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	d3-NMeFOSAA	96	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 898631
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/15/2020 1649

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/19/20	10/20/20 07:03	1282094	1282547	(EPA 537.1)	d5-NEtFOSAA	88	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	10/22/20 18:36			(EPA 1664)	Oil and Grease by 1664(subbed)	1.88	mg/L	1	1
SM 2320B - Alkalinity in CaCO3 units									
	10/16/20 21:12		1282170	(SM 2320B)	Alkalinity in CaCO3 units	160	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
10/16/20	10/19/20 22:22	1282296	1282294	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	400	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	10/19/20 17:53		1282304	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 898631
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1281618

202010150628 LH-INF-20201015
 202010150711 MB-INF-20201015

Analysis Date: 10/15/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1281621

202010150628 LH-INF-20201015
 202010150711 MB-INF-20201015

Analysis Date: 10/15/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Perchlorate

Analytical Batch: 1281864

202010150628 LH-INF-20201015
 202010150711 MB-INF-20201015

Analysis Date: 10/21/2020

Analyzed by: H5VG
 Analyzed by: H5VG

ICPMS Metals

Prep Batch: 1281647 Analytical Batch: 1281906

202010150628 LH-INF-20201015
 202010150711 MB-INF-20201015

Analysis Date: 10/17/2020

Analyzed by: DHX7
 Analyzed by: DHX7

Alkalinity in CaCO3 units

Analytical Batch: 1282170

202010150628 LH-INF-20201015
 202010150711 MB-INF-20201015

Analysis Date: 10/16/2020

Analyzed by: ZS6I
 Analyzed by: ZS6I

Total Dissolved Solids (TDS)

Prep Batch: 1282296 Analytical Batch: 1282294

202010150628 LH-INF-20201015
 202010150711 MB-INF-20201015

Analysis Date: 10/19/2020

Analyzed by: TJ52
 Analyzed by: TJ52

Total Suspended Solids (TSS)

Analytical Batch: 1282304

202010150628 LH-INF-20201015
 202010150711 MB-INF-20201015

Analysis Date: 10/19/2020

Analyzed by: TJ52
 Analyzed by: TJ52

ICP Metals

Prep Batch: 1281647 Analytical Batch: 1282435

202010150628 LH-INF-20201015
 202010150711 MB-INF-20201015

Analysis Date: 10/20/2020

Analyzed by: NINA
 Analyzed by: NINA

EPA Method 537.1

Prep Batch: 1281815 Analytical Batch: 1282526

202010150620 GAC-1-20201015
 202010150621 GAC-2-20201015
 202010150622 GAC-3-20201015
 202010150623 GAC-4-20201015
 202010150624 IX-1-20201015
 202010150625 IX-2-20201015
 202010150626 IX-3-20201015

Analysis Date: 10/19/2020

Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ

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Report: 898631
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

202010150627	IX-4-20201015	Analyzed by: SZZ
202010150628	LH-INF-20201015	Analyzed by: SZZ
202010150629	GAC-5-20201015	Analyzed by: SZZ
202010150630	GAC-6-20201015	Analyzed by: SZZ
202010150631	GAC-7-20201015	Analyzed by: SZZ
202010150632	GAC-8-20201015	Analyzed by: SZZ
202010150633	IX-5M-20201015	Analyzed by: SZZ
202010150634	IX-6M-20201015	Analyzed by: SZZ
202010150635	IX-7M-20201015	Analyzed by: SZZ
202010150636	IX-8M-20201015	Analyzed by: SZZ
202010150695	GAC-1M-20201015	Analyzed by: SZZ
202010150697	GAC-3M-20201015	Analyzed by: SZZ

EPA Method 537.1

Prep Batch: 1282094 Analytical Batch: 1282547

Analysis Date: 10/20/2020

202010150696	GAC-2M-20201015	Analyzed by: KAM
202010150698	GAC-4M-20201015	Analyzed by: KAM
202010150699	IX-1M-20201015	Analyzed by: KAM
202010150700	IX-2M-20201015	Analyzed by: KAM
202010150701	IX-3M-20201015	Analyzed by: KAM
202010150702	IX-4M-20201015	Analyzed by: KAM
202010150703	GAC-5M-20201015	Analyzed by: KAM
202010150704	GAC-6M-20201015	Analyzed by: KAM
202010150705	GAC-7M-20201015	Analyzed by: KAM
202010150706	GAC-8M-20201015	Analyzed by: KAM
202010150707	IX-5-20201015	Analyzed by: KAM
202010150708	IX-6-20201015	Analyzed by: KAM
202010150709	IX-7-20201015	Analyzed by: KAM
202010150710	IX-8-20201015	Analyzed by: KAM
202010150711	MB-INF-20201015	Analyzed by: KAM

Volatile Organics by GCMS

Prep Batch: 1282988 Analytical Batch: 1282994

Analysis Date: 10/21/2020

202010150628	LH-INF-20201015	Analyzed by: TR7W
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Hexavalent chromium(Dissolved)

Analytical Batch: 1283454

Analysis Date: 10/23/2020

202010150628	LH-INF-20201015	Analyzed by: TLH
202010150711	MB-INF-20201015	Analyzed by: TLH

Total Organic Carbon

Analytical Batch: 1284012

Analysis Date: 10/28/2020

202010150628	LH-INF-20201015	Analyzed by: ZB2Z
202010150711	MB-INF-20201015	Analyzed by: ZB2Z

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Report: 898631
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 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1281618					Analysis Date: 10/15/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.59	mg/L	104	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.53	mg/L	101	(90-110)	20	2.3
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0502	mg/L	100	(50-150)		
MRLW	Nitrate as Nitrogen by IC		0.013	0.0168	mg/L	134	(50-150)		
MS_202010150637	Nitrate as Nitrogen by IC	14	6.5	20.5	mg/L	110	(80-120)		
MS_202010150711	Nitrate as Nitrogen by IC	2.7	6.5	9.54	mg/L	109	(80-120)		
MSD_202010150637	Nitrate as Nitrogen by IC	14	6.5	20.5	mg/L	110	(80-120)	20	0.087
MSD_202010150711	Nitrate as Nitrogen by IC	2.7	6.5	9.57	mg/L	110	(80-120)	20	0.35
LCS1	Nitrite Nitrogen by IC		1	1.04	mg/L	104	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)	20	1.9
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0525	mg/L	105	(50-150)		
MRLW	Nitrite Nitrogen by IC		0.013	0.0124	mg/L	99	(50-150)		
MS_202010150637	Nitrite Nitrogen by IC	ND	2.5	2.62	mg/L	105	(80-120)		
MS_202010150711	Nitrite Nitrogen by IC	ND	2.5	2.63	mg/L	105	(80-120)		
MSD_202010150637	Nitrite Nitrogen by IC	ND	2.5	2.65	mg/L	106	(80-120)	20	1.0
MSD_202010150711	Nitrite Nitrogen by IC	ND	2.5	2.63	mg/L	105	(80-120)	20	0.13
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1281621					Analysis Date: 10/15/2020				
LCS1	Chloride		25	27.0	mg/L	108	(90-110)		
LCS2	Chloride		25	26.3	mg/L	105	(90-110)	20	2.6
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.457	mg/L	92	(50-150)		
MS_202010150637	Chloride	31	65	103	mg/L	116	(80-120)		
MS_202010150711	Chloride	50	65	123	mg/L	117	(80-120)		
MSD_202010150637	Chloride	31	65	104	mg/L	117	(80-120)	20	0.91
MSD_202010150711	Chloride	50	65	123	mg/L	117	(80-120)	20	0.10
LCS1	Sulfate		50	53.4	mg/L	107	(90-110)		
LCS2	Sulfate		50	52.1	mg/L	104	(90-110)	20	2.5
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	1.00	mg/L	100	(50-150)		
MRLW	Sulfate		0.25	0.246	mg/L	98	(50-150)		
MS_202010150637	Sulfate	21	125	159	mg/L	111	(80-120)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202010150711	Sulfate	77	125	219	mg/L	113	(80-120)		
MSD_202010150637	Sulfate	21	125	161	mg/L	112	(80-120)	20	1.0
MSD_202010150711	Sulfate	77	125	219	mg/L	114	(80-120)	20	0.15

Perchlorate by EPA 314.0

Analytical Batch: 1281864

Analysis Date: 10/21/2020

LCS1	Perchlorate		25	23.5	ug/L	94	(85-115)		
LCS2	Perchlorate		25	23.8	ug/L	95	(85-115)	15	1.3
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.49	ug/L	87	(75-125)		
MS_202010140497	Perchlorate	ND	25	22.2	ug/L	89	(80-120)		
MSD_202010140497	Perchlorate	ND	25	21.0	ug/L	84	(80-120)	15	5.4

ICPMS Metals by EPA 200.8

Analytical Batch: 1281906

Analysis Date: 10/17/2020

LCS1	Arsenic Total ICAP/MS		50	53.4	ug/L	107	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	51.8	ug/L	104	(85-115)	20	3.0
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.19	ug/L	119	(50-150)		
MS_202010150186	Arsenic Total ICAP/MS	ND	50	55.9	ug/L	112	(70-130)		
MS2_202010150628	Arsenic Total ICAP/MS	2.8	50	56.4	ug/L	107	(70-130)		
MSD_202010150186	Arsenic Total ICAP/MS	ND	50	54.2	ug/L	108	(70-130)	20	3.1
MSD2_202010150628	Arsenic Total ICAP/MS	2.8	50	56.6	ug/L	108	(70-130)	20	0.32
LCS1	Manganese Total ICAP/MS		100	102	ug/L	102	(85-115)		
LCS2	Manganese Total ICAP/MS		100	99.6	ug/L	100	(85-115)	20	2.4
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.05	ug/L	103	(50-150)		
MS_202010150186	Manganese Total ICAP/MS	ND	100	100	ug/L	100	(70-130)		
MS2_202010150628	Manganese Total ICAP/MS	ND	100	96.4	ug/L	96	(70-130)		
MSD_202010150186	Manganese Total ICAP/MS	ND	100	96.0	ug/L	96	(70-130)	20	4.1
MSD2_202010150628	Manganese Total ICAP/MS	ND	100	96.2	ug/L	96	(70-130)	20	0.18
LCS1	Uranium ICAP/MS		50	50.0	ug/L	100	(85-115)		
LCS2	Uranium ICAP/MS		50	49.9	ug/L	100	(85-115)	20	0.20
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	1.01	ug/L	101	(50-150)		
MS_202010150186	Uranium ICAP/MS	2.3	50	56.0	ug/L	107	(70-130)		
MS2_202010150628	Uranium ICAP/MS	5.5	50	60.2	ug/L	109	(70-130)		
MSD_202010150186	Uranium ICAP/MS	2.3	50	54.7	ug/L	105	(70-130)	20	2.4
MSD2_202010150628	Uranium ICAP/MS	5.5	50	60.3	ug/L	110	(70-130)	20	0.13

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Alkalinity in CaCO3 units by SM 2320B									
Analytical Batch: 1282170					Analysis Date: 10/16/2020				
LCS1	Alkalinity in CaCO3 units		100	98.9	mg/L	99	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.0	mg/L	98	(90-110)	20	0.91
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	1.80	mg/L	90	(50-150)		
MS_202010090100	Alkalinity in CaCO3 units	11	100	125	mg/L	114	(80-120)		
MS_202010150356	Alkalinity in CaCO3 units	73	100	183	mg/L	111	(80-120)		
MSD_202010090100	Alkalinity in CaCO3 units	11	100	124	mg/L	113	(80-120)	20	0.72
MSD_202010150356	Alkalinity in CaCO3 units	73	100	184	mg/L	111	(80-120)	20	0.38
Total Dissolved Solids (TDS) by E160.1/SM2540C									
Analytical Batch: 1282294					Analysis Date: 10/19/2020				
DUP_202009080510	Total Dissolved Solid (TDS)	1500		1490	mg/L		(0-10)	10	0.54
DUP_202010140337	Total Dissolved Solid (TDS)	630		620	mg/L		(0-10)	10	0.96
LCS1	Total Dissolved Solid (TDS)		175	200	mg/L	114	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	716	mg/L	102	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	10.0	mg/L	100	(50-150)		
Total Suspended Solids (TSS) by SM 2540D									
Analytical Batch: 1282304					Analysis Date: 10/19/2020				
DUP_202009090043	Total Suspended Solids (TSS)	930		956	mg/L		(0-10)	10	2.5
DUP_202009090056	Total Suspended Solids (TSS)	ND		1.00	mg/L		(0-10)	10	0.0
LCS1	Total Suspended Solids (TSS)		175	154	mg/L	88	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	174	mg/L	99	(71-107)	20	12
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	10.0	mg/L	100	(50-150)		
ICP Metals by EPA 200.7									
Analytical Batch: 1282435					Analysis Date: 10/20/2020				
LCS1	Calcium Total ICAP		50	49.9	mg/L	100	(85-115)		
LCS2	Calcium Total ICAP		50	50.2	mg/L	100	(85-115)	20	0.60
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.977	mg/L	98	(50-150)		
MS_202010150628	Calcium Total ICAP	110	50	157	mg/L	87	(70-130)		
MS2_202010150394	Calcium Total ICAP	57	50	105	mg/L	95	(70-130)		
MSD_202010150628	Calcium Total ICAP	110	50	159	mg/L	91	(70-130)	20	1.2

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD2_202010150394	Calcium Total ICAP	57	50	106	mg/L	98	(70-130)	20	1.2
LCS1	Iron Total ICAP		5	5.04	mg/L	101	(85-115)		
LCS2	Iron Total ICAP		5	5.06	mg/L	101	(85-115)	20	0.40
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0205	mg/L	102	(50-150)		
MS_202010150628	Iron Total ICAP	ND	5	5.05	mg/L	101	(70-130)		
MS2_202010150394	Iron Total ICAP	ND	5	5.07	mg/L	101	(70-130)		
MSD_202010150628	Iron Total ICAP	ND	5	5.12	mg/L	102	(70-130)	20	1.6
MSD2_202010150394	Iron Total ICAP	ND	5	5.14	mg/L	103	(70-130)	20	1.4
LCS1	Magnesium Total ICAP		20	19.8	mg/L	99	(85-115)		
LCS2	Magnesium Total ICAP		20	19.9	mg/L	100	(85-115)	20	0.50
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0938	mg/L	94	(50-150)		
MS_202010150628	Magnesium Total ICAP	21	20	40.7	mg/L	97	(70-130)		
MS2_202010150394	Magnesium Total ICAP	18	20	37.9	mg/L	98	(70-130)		
MSD_202010150628	Magnesium Total ICAP	21	20	41.3	mg/L	100	(70-130)	20	1.4
MSD2_202010150394	Magnesium Total ICAP	18	20	38.4	mg/L	100	(70-130)	20	1.3
LCS1	Potassium Total ICAP		20	20.0	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	20.1	mg/L	100	(85-115)	20	0.50
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.724	mg/L	72	(50-150)		
MS_202010150628	Potassium Total ICAP	4.7	20	26.3	mg/L	108	(70-130)		
MS2_202010150394	Potassium Total ICAP	1.8	20	23.5	mg/L	108	(70-130)		
MSD_202010150628	Potassium Total ICAP	4.7	20	26.7	mg/L	110	(70-130)	20	1.5
MSD2_202010150394	Potassium Total ICAP	1.8	20	23.8	mg/L	110	(70-130)	20	1.6
LCS1	Sodium Total ICAP		50	49.6	mg/L	99	(85-115)		
LCS2	Sodium Total ICAP		50	49.7	mg/L	99	(85-115)	20	0.20
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.931	mg/L	93	(50-150)		
MS_202010150628	Sodium Total ICAP	69	50	113	mg/L	88	(70-130)		
MS2_202010150394	Sodium Total ICAP	60	50	104	mg/L	89	(70-130)		
MSD_202010150628	Sodium Total ICAP	69	50	115	mg/L	91	(70-130)	20	1.5
MSD2_202010150394	Sodium Total ICAP	60	50	106	mg/L	92	(70-130)	20	1.7

EPA Method 537.1 by EPA 537.1

Prep Batch: 1281815 Analytical Batch: 1282526

Analysis Date: 10/19/2020

DUP_202010150623	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0496	ug/L	105	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0491	ug/L	104	(70-130)	30	1.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00185	ug/L	99	(50-150)		
MS_202010150620	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00202	ug/L	106	(50-150)		
DUP_202010150623	13C2-PFDA (S)			103	%	103	(70-130)		
LCS3	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFDA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFDA (S)			103	%	103	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	105	%	105	(70-130)		
MS_202010150620	13C2-PFDA (S)		100	111	%	111	(70-130)		
DUP_202010150623	13C2-PFHxA (S)			111	%	111	(70-130)		
LCS3	13C2-PFHxA (S)		100	114	%	115	(70-130)		
LCS4	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MBLK	13C2-PFHxA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MS_202010150620	13C2-PFHxA (S)		100	116	%	117	(70-130)		
DUP_202010150623	13C2-PFOA- IS#1 (I)			92.7	%	93	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	91.3	%	91	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	89.4	%	89	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			90.3	%	90	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	94.1	%	94	(50-150)		
MS_202010150620	13C2-PFOA- IS#1 (I)		100	94.8	%	95	(50-150)		
DUP_202010150623	13C3-HFPO-DA (S)			104	%	104	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	108	%	108	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MBLK	13C3-HFPO-DA (S)			103	%	103	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MS_202010150620	13C3-HFPO-DA (S)		100	110	%	110	(70-130)		
DUP_202010150623	13C4-PFOS- IS#2 (I)			91.7	%	92	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	92.6	%	93	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	92.8	%	93	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			95.3	%	95	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	92.5	%	92	(50-150)		
MS_202010150620	13C4-PFOS- IS#2 (I)		100	95.6	%	96	(50-150)		
DUP_202010150623	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0545	ug/L	112	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0555	ug/L	115	(70-130)	30	1.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00225	ug/L	119	(50-150)		
MS_202010150620	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00234	ug/L	121	(50-150)		
DUP_202010150623	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0518	ug/L	111	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0511	ug/L	110	(70-130)	30	1.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00202	ug/L	109	(50-150)		
MS_202010150620	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00210	ug/L	112	(50-150)		
DUP_202010150623	d3-NMeFOSAA (I)			98.0	%	98	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	98.4	%	98	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	95.1	%	95	(50-150)		
MBLK	d3-NMeFOSAA (I)			96.5	%	97	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	98.8	%	99	(50-150)		
MS_202010150620	d3-NMeFOSAA (I)		100	99.4	%	99	(50-150)		
DUP_202010150623	d5-NEtFOSAA (S)			91.0	%	91	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	95.0	%	95	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	89.2	%	89	(70-130)		
MBLK	d5-NEtFOSAA (S)			89.2	%	89	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	94.2	%	94	(70-130)		
MS_202010150620	d5-NEtFOSAA (S)		100	96.3	%	96	(70-130)		
DUP_202010150623	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0546	ug/L	109	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0554	ug/L	111	(70-130)	30	1.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00216	ug/L	108	(50-150)		
MS_202010150620	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00232	ug/L	116	(50-150)		
DUP_202010150623	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0510	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0526	ug/L	105	(70-130)	30	3.1
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00212	ug/L	106	(50-150)		
MS_202010150620	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00227	ug/L	106	(50-150)		
DUP_202010150623	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0533	ug/L	107	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0550	ug/L	110	(70-130)	30	3.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00227	ug/L	113	(50-150)		
MS_202010150620	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00231	ug/L	107	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202010150623	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0502	ug/L	113	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0512	ug/L	116	(70-130)	30	2.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00203	ug/L	114	(50-150)		
MS_202010150620	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00224	ug/L	122	(50-150)		
DUP_202010150623	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0567	ug/L	113	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0576	ug/L	115	(70-130)	30	1.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202010150620	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00241	ug/L	114	(50-150)		
DUP_202010150623	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0553	ug/L	111	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0562	ug/L	113	(70-130)	30	1.8
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00215	ug/L	107	(50-150)		
MS_202010150620	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00229	ug/L	111	(50-150)		
DUP_202010150623	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0580	ug/L	116	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0584	ug/L	117	(70-130)	30	0.69
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00239	ug/L	119	(50-150)		
MS_202010150620	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00252	ug/L	122	(50-150)		
DUP_202010150623	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0512	ug/L	112	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0510	ug/L	112	(70-130)	30	0.39
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00205	ug/L	112	(50-150)		
MS_202010150620	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00224	ug/L	122	(50-150)		
DUP_202010150623	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0590	ug/L	118	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0602	ug/L	120	(70-130)	30	1.8
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00247	ug/L	123	(50-150)		
MS_202010150620	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00279	ug/L	128	(50-150)		
DUP_202010150623	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0577	ug/L	115	(70-130)		

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0589	ug/L	118	(70-130)	30	2.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00242	ug/L	121	(50-150)		
MS_202010150620	Perfluorononanoic acid (PFNA)	ND	0.002	0.00256	ug/L	122	(50-150)		
DUP_202010150623	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0510	ug/L	110	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0514	ug/L	111	(70-130)	30	0.78
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00212	ug/L	114	(50-150)		
MS_202010150620	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00223	ug/L	115	(50-150)		
DUP_202010150623	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0578	ug/L	116	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0595	ug/L	119	(70-130)	30	2.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00250	ug/L	125	(50-150)		
MS_202010150620	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00267	ug/L	125	(50-150)		
DUP_202010150623	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0550	ug/L	110	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0558	ug/L	112	(70-130)	30	1.4
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00217	ug/L	108	(50-150)		
MS_202010150620	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00225	ug/L	112	(50-150)		
DUP_202010150623	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0545	ug/L	109	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0551	ug/L	110	(70-130)	30	1.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00211	ug/L	106	(50-150)		
MS_202010150620	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00223	ug/L	108	(50-150)		
DUP_202010150623	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0553	ug/L	111	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0550	ug/L	110	(70-130)	30	0.54
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202010150620	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00230	ug/L	112	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1282094 Analytical Batch: 1282547

Analysis Date: 10/20/2020

DUP_202010160117	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 898631
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0260	ug/L	111	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0256	ug/L	109	(70-130)	30	1.6
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00210	ug/L	112	(50-150)		
MS1_202010150459	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0258	ug/L	110	(70-130)		
DUP_202010160117	13C2-PFDA (S)			105	%	105	(70-130)		
LCS1	13C2-PFDA (S)		100	99.2	%	99	(70-130)		
LCS2	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	108	%	108	(70-130)		
MS1_202010150459	13C2-PFDA (S)		100	103	%	103	(70-130)		
DUP_202010160117	13C2-PFHxA (S)			110	%	110	(70-130)		
LCS1	13C2-PFHxA (S)		100	104	%	104	(70-130)		
LCS2	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFHxA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MS1_202010150459	13C2-PFHxA (S)		100	106	%	106	(70-130)		
DUP_202010160117	13C2-PFOA- IS#1 (I)			97.6	%	98	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	96.9	%	97	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	94.7	%	95	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.6	%	99	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	98.2	%	98	(50-150)		
MS1_202010150459	13C2-PFOA- IS#1 (I)		100	96.2	%	96	(50-150)		
DUP_202010160117	13C3-HFPO-DA (S)			104	%	105	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	98.6	%	99	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	99.5	%	100	(70-130)		
MBLK	13C3-HFPO-DA (S)			107	%	107	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MS1_202010150459	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
DUP_202010160117	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	102	%	103	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MS1_202010150459	13C4-PFOS- IS#2 (I)		100	98.2	%	98	(50-150)		
DUP_202010160117	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0284	ug/L	120	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0287	ug/L	122	(70-130)	30	0.70

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00231	ug/L	122	(50-150)		
MS1_202010150459	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0291	ug/L	123	(70-130)		
DUP_202010160117	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0274	ug/L	118	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0269	ug/L	116	(70-130)	30	1.8
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00229	ug/L	123	(50-150)		
MS1_202010150459	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0272	ug/L	117	(70-130)		
DUP_202010160117	d3-NMeFOSAA (I)			103	%	103	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	99.6	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			106	%	106	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MS1_202010150459	d3-NMeFOSAA (I)		100	102	%	103	(50-150)		
DUP_202010160117	d5-NEtFOSAA (S)			88.4	%	88	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	89.8	%	90	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	88.9	%	89	(70-130)		
MBLK	d5-NEtFOSAA (S)			93.2	%	93	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	92.2	%	92	(70-130)		
MS1_202010150459	d5-NEtFOSAA (S)		100	90.4	%	90	(70-130)		
DUP_202010160117	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0302	ug/L	121	(70-130)	30	3.4
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00238	ug/L	119	(50-150)		
MS1_202010150459	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0296	ug/L	118	(70-130)		
DUP_202010160117	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0269	ug/L	108	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0271	ug/L	108	(70-130)	30	0.74
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS1_202010150459	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0265	ug/L	106	(70-130)		
DUP_202010160117	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0272	ug/L	109	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)	30	1.1
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		

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Report: 898631
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202010150459	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0276	ug/L	111	(70-130)		
DUP_202010160117	Perfluorobutanesulfonic acid (PFBS)	0.0034		0.00349	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0252	ug/L	114	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0258	ug/L	117	(70-130)	30	2.7
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00210	ug/L	119	(50-150)		
MS1_202010150459	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0276	ug/L	121	(70-130)		
DUP_202010160117	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0300	ug/L	120	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0302	ug/L	121	(70-130)	30	0.66
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00251	ug/L	126	(50-150)		
MS1_202010150459	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0300	ug/L	120	(70-130)		
DUP_202010160117	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0308	ug/L	123	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0310	ug/L	124	(70-130)	30	0.65
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00242	ug/L	121	(50-150)		
MS1_202010150459	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0284	ug/L	114	(70-130)		
DUP_202010160117	Perfluoroheptanoic acid (PFHpA)	0.0025		0.00240	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0302	ug/L	121	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0305	ug/L	122	(70-130)	30	0.99
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00248	ug/L	124	(50-150)		
MS1_202010150459	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0309	ug/L	121	(70-130)		
DUP_202010160117	Perfluorohexanesulfonic acid (PFHxS)	0.0037		0.00357	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0255	ug/L	112	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0258	ug/L	113	(70-130)	30	1.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00216	ug/L	119	(50-150)		
MS1_202010150459	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0268	ug/L	115	(70-130)		
DUP_202010160117	Perfluorohexanoic acid (PFHxA)	0.0049		0.00471	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0301	ug/L	120	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0307	ug/L	123	(70-130)	30	2.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00247	ug/L	124	(50-150)		
MS1_202010150459	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0312	ug/L	119	(70-130)		
DUP_202010160117	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0304	ug/L	122	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0310	ug/L	124	(70-130)	30	2.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00259	ug/L	129	(50-150)		
MS1_202010150459	Perfluorononanoic acid (PFNA)	ND	0.025	0.0305	ug/L	120	(70-130)		
DUP_202010160117	Perfluorooctanesulfonic acid (PFOS)	0.0091		0.00917	ug/L		(0-30)	30	0.22
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0271	ug/L	117	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0272	ug/L	117	(70-130)	30	0.37
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00225	ug/L	121	(50-150)		
MS1_202010150459	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0277	ug/L	115	(70-130)		
DUP_202010160117	Perfluorooctanoic acid (PFOA)	0.0054		0.00558	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0296	ug/L	118	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0300	ug/L	120	(70-130)	30	1.7
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00263	ug/L	131	(50-150)		
MS1_202010150459	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0311	ug/L	120	(70-130)		
DUP_202010160117	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0310	ug/L	124	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0318	ug/L	127	(70-130)	30	2.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00276	ug/L	138	(50-150)		
MS1_202010150459	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0324	ug/L	130	(70-130)		
DUP_202010160117	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0293	ug/L	117	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0297	ug/L	119	(70-130)	30	1.4
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00235	ug/L	117	(50-150)		
MS1_202010150459	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0290	ug/L	116	(70-130)		
DUP_202010160117	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0290	ug/L	116	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0291	ug/L	117	(70-130)	30	0.34
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00227	ug/L	114	(50-150)		
MS1_202010150459	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0286	ug/L	114	(70-130)		

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Analytical Batch: 1282994

Analysis Date: 10/21/2020

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	1,1,1,2-Tetrachloroethane		5	4.60	ug/L	92	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.55	ug/L	91	(70-130)	20	1.1
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.400	ug/L	80	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.57	ug/L	91	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.24	ug/L	85	(70-130)	20	7.5
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.08	ug/L	102	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.74	ug/L	95	(70-130)	20	6.9
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.88	ug/L	98	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.90	ug/L	98	(70-130)	20	0.41
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1-Dichloroethane		5	5.05	ug/L	101	(70-130)		
LCS2	1,1-Dichloroethane		5	4.98	ug/L	100	(70-130)	20	1.4
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.92	ug/L	98	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.92	ug/L	98	(70-130)	20	0.0
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.460	ug/L	92	(50-150)		
LCS1	1,1-Dichloropropene		5	4.61	ug/L	92	(70-130)		
LCS2	1,1-Dichloropropene		5	4.46	ug/L	89	(70-130)	20	3.3
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.35	ug/L	87	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.63	ug/L	93	(70-130)	20	6.2
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.08	ug/L	102	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.12	ug/L	102	(70-130)	20	0.78
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.27	ug/L	85	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.38	ug/L	88	(70-130)	20	2.5

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.76	ug/L	95	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.50	ug/L	90	(70-130)	20	5.6
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	1,2-Dichloroethane		5	5.38	ug/L	108	(70-130)		
LCS2	1,2-Dichloroethane		5	5.02	ug/L	100	(70-130)	20	6.9
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	107	%	107	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	107	%	107	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			105	%	105	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
MRL_LW	1,2-Dichloroethane-d4 (S)		5	107	%	107	(70-130)		
LCS1	1,2-Dichloropropane		5	4.84	ug/L	97	(70-130)		
LCS2	1,2-Dichloropropane		5	4.64	ug/L	93	(70-130)	20	4.2
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.71	ug/L	94	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.48	ug/L	90	(70-130)	20	5.0
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.410	ug/L	82	(50-150)		
LCS1	1,3-Dichloropropane		5	4.95	ug/L	99	(70-130)		
LCS2	1,3-Dichloropropane		5	4.92	ug/L	98	(70-130)	20	0.61
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.440	ug/L	88	(50-150)		
LCS1	2,2-Dichloropropane		5	4.13	ug/L	83	(70-130)		
LCS2	2,2-Dichloropropane		5	4.24	ug/L	85	(70-130)	20	2.6
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.380	ug/L	76	(50-150)		
LCS1	2-Butanone (MEK)		50	51.8	ug/L	104	(70-130)		
LCS2	2-Butanone (MEK)		50	51.8	ug/L	104	(70-130)	20	0.0
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.92	ug/L	118	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	98.6	%	99	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	101	%	101	(70-130)		
MBLK	4-Bromofluorobenzene (S)			93.2	%	93	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	4-Bromofluorobenzene (S)		5	96.6	%	97	(70-130)		
MRL_LW	4-Bromofluorobenzene (S)		5	98.2	%	98	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	48.2	ug/L	96	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	47.8	ug/L	96	(70-130)	20	0.83
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.20	ug/L	84	(50-150)		
LCS1	Benzene		5	5.01	ug/L	100	(70-130)		
LCS2	Benzene		5	4.77	ug/L	95	(70-130)	20	4.9
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Bromobenzene		5	4.74	ug/L	95	(70-130)		
LCS2	Bromobenzene		5	4.62	ug/L	92	(70-130)	20	2.6
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.440	ug/L	88	(50-150)		
LCS1	Bromochloromethane		5	4.80	ug/L	96	(70-130)		
LCS2	Bromochloromethane		5	4.85	ug/L	97	(70-130)	20	1.0
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Bromodichloromethane		5	4.67	ug/L	93	(70-130)		
LCS2	Bromodichloromethane		5	4.63	ug/L	93	(70-130)	20	0.86
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.460	ug/L	92	(50-150)		
LCS1	Bromoethane		5	4.95	ug/L	99	(70-130)		
LCS2	Bromoethane		5	5.26	ug/L	105	(70-130)	20	6.1
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Bromoform		5	4.17	ug/L	83	(70-130)		
LCS2	Bromoform		5	3.91	ug/L	78	(70-130)	20	6.4
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.380	ug/L	76	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.22	ug/L	104	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.64	ug/L	113	(70-130)	20	7.7
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.540	ug/L	108	(50-150)		
LCS1	Carbon disulfide		5	4.79	ug/L	96	(70-130)		
LCS2	Carbon disulfide		5	4.63	ug/L	93	(70-130)	20	3.4
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.440	ug/L	88	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Carbon Tetrachloride		5	3.92	ug/L	78	(70-130)		
LCS2	Carbon Tetrachloride		5	4.02	ug/L	80	(70-130)	20	2.5
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.430	ug/L	86	(50-150)		
LCS1	Chlorobenzene		5	4.58	ug/L	92	(70-130)		
LCS2	Chlorobenzene		5	4.46	ug/L	89	(70-130)	20	2.6
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.370	ug/L	74	(50-150)		
LCS1	Chlorodibromomethane		5	4.59	ug/L	92	(70-130)		
LCS2	Chlorodibromomethane		5	4.64	ug/L	93	(70-130)	20	1.1
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	Chloroethane		5	4.68	ug/L	94	(70-130)		
LCS2	Chloroethane		5	5.19	ug/L	104	(70-130)	20	10
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.72	ug/L	94	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.74	ug/L	95	(70-130)	20	0.42
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.66	ug/L	93	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.90	ug/L	98	(70-130)	20	5.0
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.640	ug/L	128	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	5.10	ug/L	102	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.90	ug/L	98	(70-130)	20	4.0
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.30	ug/L	86	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.33	ug/L	87	(70-130)	20	0.70
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Dibromomethane		5	4.93	ug/L	99	(70-130)		
LCS2	Dibromomethane		5	4.60	ug/L	92	(70-130)	20	6.9
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.90	ug/L	98	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.64	ug/L	93	(70-130)	20	5.5

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Dichloromethane		5	4.94	ug/L	99	(70-130)		
LCS2	Dichloromethane		5	4.78	ug/L	96	(70-130)	20	3.3
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.680	ug/L	136	(50-150)		
LCS1	Di-isopropyl ether		5	5.12	ug/L	102	(70-130)		
LCS2	Di-isopropyl ether		5	5.11	ug/L	102	(70-130)	20	0.20
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.520	ug/L	104	(50-150)		
LCS1	Ethyl benzene		5	4.69	ug/L	94	(70-130)		
LCS2	Ethyl benzene		5	4.65	ug/L	93	(70-130)	20	0.86
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.400	ug/L	80	(50-150)		
LCS1	Hexachlorobutadiene		5	4.33	ug/L	87	(70-130)		
LCS2	Hexachlorobutadiene		5	4.72	ug/L	94	(70-130)	20	8.6
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.520	ug/L	104	(50-150)		
LCS1	Isopropylbenzene		5	4.88	ug/L	98	(70-130)		
LCS2	Isopropylbenzene		5	4.63	ug/L	93	(70-130)	20	5.3
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	m,p-Xylenes		10	9.47	ug/L	95	(70-130)		
LCS2	m,p-Xylenes		10	9.58	ug/L	96	(70-130)	20	1.1
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.730	ug/L	73	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.420	ug/L	84	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.75	ug/L	95	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.61	ug/L	92	(70-130)	20	3.0
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.410	ug/L	82	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.89	ug/L	98	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.83	ug/L	97	(70-130)	20	1.2
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.660	ug/L	132	(50-150)		
LCS1	Naphthalene		5	4.30	ug/L	86	(70-130)		
LCS2	Naphthalene		5	4.60	ug/L	92	(70-130)	20	6.7
MBLK	Naphthalene			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 898631
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Naphthalene		0.5	0.390	ug/L	78	(50-150)		
LCS1	n-Butylbenzene		5	4.45	ug/L	89	(70-130)		
LCS2	n-Butylbenzene		5	4.50	ug/L	90	(70-130)	20	1.1
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.440	ug/L	88	(50-150)		
LCS1	n-Propylbenzene		5	4.64	ug/L	93	(70-130)		
LCS2	n-Propylbenzene		5	4.58	ug/L	92	(70-130)	20	1.3
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	o-Chlorotoluene		5	4.70	ug/L	94	(70-130)		
LCS2	o-Chlorotoluene		5	4.61	ug/L	92	(70-130)	20	1.9
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.410	ug/L	82	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.59	ug/L	92	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.66	ug/L	93	(70-130)	20	1.5
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.460	ug/L	92	(50-150)		
LCS1	o-Xylene		5	4.75	ug/L	95	(70-130)		
LCS2	o-Xylene		5	4.48	ug/L	90	(70-130)	20	5.8
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.390	ug/L	78	(50-150)		
LCS1	p-Chlorotoluene		5	4.69	ug/L	94	(70-130)		
LCS2	p-Chlorotoluene		5	4.61	ug/L	92	(70-130)	20	1.7
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.400	ug/L	80	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.71	ug/L	94	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	4.47	ug/L	89	(70-130)	20	5.2
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.420	ug/L	84	(50-150)		
LCS1	p-Isopropyltoluene		5	4.65	ug/L	93	(70-130)		
LCS2	p-Isopropyltoluene		5	4.45	ug/L	89	(70-130)	20	4.4
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.390	ug/L	78	(50-150)		
LCS1	sec-Butylbenzene		5	5.13	ug/L	103	(70-130)		
LCS2	sec-Butylbenzene		5	5.04	ug/L	101	(70-130)	20	1.8
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	Styrene		5	4.89	ug/L	98	(70-130)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Styrene		5	4.80	ug/L	96	(70-130)	20	1.9
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.380	ug/L	76	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.11	ug/L	82	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.22	ug/L	84	(70-130)	20	2.6
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.430	ug/L	86	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.62	ug/L	92	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.49	ug/L	90	(70-130)	20	2.9
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.490	ug/L	98	(50-150)		
LCS1	tert-Butylbenzene		5	4.65	ug/L	93	(70-130)		
LCS2	tert-Butylbenzene		5	4.44	ug/L	89	(70-130)	20	4.6
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.62	ug/L	92	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.34	ug/L	87	(70-130)	20	6.3
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.460	ug/L	92	(50-150)		
LCS1	Toluene		5	4.86	ug/L	97	(70-130)		
LCS2	Toluene		5	4.69	ug/L	94	(70-130)	20	3.6
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Toluene-d8 (S)		5	103	%	103	(70-130)		
LCS2	Toluene-d8 (S)		5	102	%	102	(70-130)		
MBLK	Toluene-d8 (S)			92.8	%	93	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	96.6	%	97	(70-130)		
MRLLLW	Toluene-d8 (S)		5	96.6	%	97	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.98	ug/L	100	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.04	ug/L	101	(70-130)	20	1.2
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.430	ug/L	86	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.51	ug/L	90	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.48	ug/L	90	(70-130)	20	0.67
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.400	ug/L	80	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.68	ug/L	94	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.60	ug/L	92	(70-130)	20	1.7

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 898631
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.430	ug/L	86	(50-150)		
LCS1	Trichlorofluoromethane		5	4.65	ug/L	93	(70-130)		
LCS2	Trichlorofluoromethane		5	4.59	ug/L	92	(70-130)	20	1.3
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.14	ug/L	103	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	5.22	ug/L	104	(70-130)	20	1.5
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.540	ug/L	108	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.58	ug/L	92	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.58	ug/L	92	(70-130)	20	0.0
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.520	ug/L	104	(50-150)		
MRLCW	Vinyl chloride (VC)		0.25	0.310	ug/L	124	(50-150)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1283454

Analysis Date: 10/23/2020

LCS1	Hexavalent chromium(Dissolved)		2	1.97	ug/L	98	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.99	ug/L	99	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0131	ug/L	66	(50-150)		
MS_202010150296	Hexavalent chromium(Dissolved)	0.41	2	2.43	ug/L	101	(90-110)		
MSD_202010150296	Hexavalent chromium(Dissolved)	0.41	2	2.43	ug/L	101	(90-110)	20	0.091

Total Organic Carbon by SM 5310C

Analytical Batch: 1284012

Analysis Date: 10/27/2020

LCS1	Total Organic Carbon		5	5.30	mg/L	106	(90-110)		
LCS2	Total Organic Carbon		5	5.24	mg/L	105	(90-110)	20	0.95
MBLK	Total Organic Carbon			<0.15	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.243	mg/L	121	(50-150)		
MS_202010150257	Total Organic Carbon	2.7	4	6.94	mg/L	106	(80-120)		
MS2_202010150307	Total Organic Carbon	0.22	2	2.34	mg/L	106	(80-120)		
MSD_202010150257	Total Organic Carbon	2.7	4	6.96	mg/L	106	(80-120)	20	0.39
MSD2_202010150307	Total Organic Carbon	0.22	2	2.36	mg/L	107	(80-120)	20	0.72

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/29/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 10/29/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 10/29/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/29/2020

Quant Report - Page 1 of 1

Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-41273-1
Client Project/Site: 898631

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
10/22/2020 4:49:23 PM

Lori Thompson, Project Manager I
(714)895-5494
Lori.Thompson@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 898631

Job ID: 570-41273-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 898631

Job ID: 570-41273-1

Job ID: 570-41273-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-41273-1

Comments

No additional comments.

Receipt

The sample was received on 10/16/2020 10:30 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.9° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-102836.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 898631

Job ID: 570-41273-1

Client Sample ID: 202010150628

Lab Sample ID: 570-41273-1

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 898631

Job ID: 570-41273-1

General Chemistry

Client Sample ID: 202010150628

Date Collected: 10/15/20 09:50

Date Received: 10/16/20 10:40

Lab Sample ID: 570-41273-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.982	0.786	mg/L		10/19/20 10:02	10/20/20 17:25	1

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QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 898631

Job ID: 570-41273-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-102836/1-A
Matrix: Water
Analysis Batch: 103290

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 102836

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		10/19/20 10:02	10/20/20 17:25	1

Lab Sample ID: LCS 570-102836/2-A
Matrix: Water
Analysis Batch: 103290

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 102836

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.40		mg/L		93	78 - 114

Lab Sample ID: LCSD 570-102836/3-A
Matrix: Water
Analysis Batch: 103290

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 102836

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.40		mg/L		93	78 - 114	0	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 898631

Job ID: 570-41273-1

General Chemistry

Prep Batch: 102836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-41273-1	202010150628	Total/NA	Water	1664A	
MB 570-102836/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-102836/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-102836/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 103290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-41273-1	202010150628	Total/NA	Water	1664A	102836
MB 570-102836/1-A	Method Blank	Total/NA	Water	1664A	102836
LCS 570-102836/2-A	Lab Control Sample	Total/NA	Water	1664A	102836
LCSD 570-102836/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	102836

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Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 898631

Job ID: 570-41273-1

Client Sample ID: 202010150628

Lab Sample ID: 570-41273-1

Date Collected: 10/15/20 09:50

Matrix: Water

Date Received: 10/16/20 10:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1018 mL	1000 mL	102836	10/19/20 10:02	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			103290	10/20/20 17:25	L6IE	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 898631

Job ID: 570-41273-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-30-21
Guam	State	20-003R	10-31-20
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

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Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 898631

Job ID: 570-41273-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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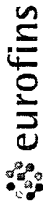
Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 898631

Job ID: 570-41273-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-41273-1	202010150628	Water	10/15/20 09:50	10/16/20 10:40	

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Eaton Analytical

Ship To:

Eurofins CalScience
7440 Lincoln Way

Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 898631 **Report Due: 10/29/2020**

Submittal Form

41273

Date: 10/16/2020

***REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**
Report & Invoice must have the Folder # 898631 Job # 1000014

Report all quality control data according to Method, include dates analyzed, Date extracted (if extracted) and Method reference on the report.
Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: Eaton-MonroviaSubContract@eurofinset.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix
Samples from: CALIFORNIA

Client Sample ID for reference on!

LH-INF-20201015

Sample ID
202010150628

Sample Date & Time Matrix
10/15/20 0950 DW

JLS

Sample type: **Sample Event:** **Facility ID:** **Sample Point ID:** **Static ID:**

Method EPA 1664 **Prep Method** Oil and Grease by 1664(subbed) **Analysis Requested**



570-41273 Chain of Custody

Relinquished by: Xan	Sample Control	Date 10/16/20	Time 1030
Received by: [Signature]	Sample Control	Date 10/16/20	Time 1040
Relinquished by:	Sample Control	Date	Time
Received by:	Sample Control	Date	Time

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgment of Receipt is requested to: affirm Jackie Contreras

2-7 / 1-9 56

Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-41273-1

Login Number: 41273

List Source: Eurofins Calscience

List Number: 1

Creator: Le, Danny

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 899759
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 899759
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **October 22, 2020 at 1438**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202010220303	GAC-1-20201022 Static ID: 537.1 @537.1	10/22/2020 0930
202010220304	GAC-2-20201022 Static ID: 537.1 @537.1	10/22/2020 0933
202010220305	GAC-3-20201022 Static ID: 537.1 @537.1	10/22/2020 0936
202010220306	GAC-4-20201022 Static ID: 537.1 @537.1	10/22/2020 0939
202010220307	IX-1-20201022 Static ID: 537.1 @537.1	10/22/2020 0942
202010220308	IX-2-20201022 Static ID: 537.1 @537.1	10/22/2020 0945
202010220309	IX-3-20201022 Static ID: 537.1 @537.1	10/22/2020 0948
202010220310	IX-4-20201022 Static ID: 537.1 @537.1	10/22/2020 0951
202010220311	GAC-5-20201022 Static ID: 537.1 @537.1	10/22/2020 1130
202010220312	GAC-6-20201022 Static ID: 537.1 @537.1	10/22/2020 1133
202010220313	GAC-7-20201022 Static ID: 537.1	10/22/2020 1136

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 899759
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
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The following samples were received from you on **October 22, 2020 at 1438**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202010220314	GAC-8-20201022 Static ID: 537.1	10/22/2020 1139
	@537.1	
202010220315	IX-5-20201022 Static ID: 537.1	10/22/2020 1142
	@537.1	
202010220316	IX-6-20201022 Static ID: 537.1	10/22/2020 1145
	@537.1	
202010220317	IX-7-20201022 Static ID: 537.1	10/22/2020 1148
	@537.1	
202010220318	IX-8-20201022 Static ID: 537.1	10/22/2020 1151
	@537.1	

Test Description

@537.1 -- EPA Method 537.1



89959

FROM: GSI Environmental Inc.
19200 Von Karman Ave, Suite 800
Irvine, CA 92612
(949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miae Jeon

GLOBAL ID:

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

LABORATORY: Eurofins Eaton Analytical

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang

SAMPLER(S): (PRINT)
BC

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	PRESERVATION			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME			Unpreserved	Preserved	Field Filtered				
	GAC-1-20201022	10/22/20	930	Water	2		2		X			
	GAC-2-20201022		933	Water	↓		↓		X			
	GAC-3-20201022		936	Water	↓		↓		X			
	GAC-4-20201022		939	Water	↓		↓		X			
	IX-1-20201022		942	Water	↓		↓		X			
	IX-2-20201022		945	Water	↓		↓		X			
	IX-3-20201022		948	Water	↓		↓		X			
	IX-4-20201022		951	Water	↓		↓		X			
	LH-INF			Water					X	X		BC
	LH-INF-DUP			Water					X	X		BC
	GAC-5-20201022	10/22/20	1130	Water	2		2		X			
	GAC-6-20201022		1133	Water	↓		↓		X			
	GAC-7-20201022		1136	Water	↓		↓		X			
	GAC-8-20201022		1139	Water	↓		↓		X			

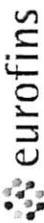
Relinquished by: (Signature) *[Signature]* Date: 10/22/2020 Time: 7:438

Relinquished by: (Signature) *[Signature]* Date: 10-22-20 Time: 1:38

Relinquished by: (Signature) *[Signature]* Date: Time:

899759

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302								
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang								
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) BC								
LABORATORY: Eurofins Eaton Analytical		REQUESTED ANALYSES Please check box or fill in blank as needed.										
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD												
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rtorres@gsi-net.com; Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	IX-5-20201022	10/22/20	11:42	Water	2		X		X			
	IX-6-20201022		11:45	Water	↓		X		X			
	IX-7-20201022		11:48	Water	↓		X		X			
	IX-8-20201022		11:51	Water	↓		X		X			
	MB-INF			Water			X		X			
	MB-INF-DUP			Water			X		X			
	FB			Water			X		X			
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>		Date: 10/22/2020		Time: 4:38		
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>		Date: 10.22.20		Time: 4:38		
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>		Date:		Time:		



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 899759

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616 (Observation = 5.7 °C) (Corr. Factor -0.3 °C) (Final = 5.4 °C)

TYPE OF ICE: Real Synthetic No Ice Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA and Radon Headspace: No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251.552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
<u>Chris Beck</u>	<u>Chris Beck</u>	Eurofins Eaton Analytical	<u>10.22.20</u>	<u>1438</u>

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 899759
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Water Replenishment District
 Joseph Liles
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Samples Received on:
 10/22/2020 1438

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
10/26/2020 18:08	Perfluorohexanoic acid (PFHxA)	202010220307 <u>IX-1-20201022</u>	0.0024		ug/L	0.0020
10/26/2020 18:27	Perfluorohexanoic acid (PFHxA)	202010220308 <u>IX-2-20201022</u>	0.0040		ug/L	0.0020
10/26/2020 19:25	Perfluorohexanoic acid (PFHxA)	202010220309 <u>IX-3-20201022</u>	0.0040		ug/L	0.0020
10/26/2020 19:34	Perfluorohexanoic acid (PFHxA)	202010220310 <u>IX-4-20201022</u>	0.0040		ug/L	0.0020
10/26/2020 19:44	Perfluorobutanesulfonic acid (PFBS)	202010220311 <u>GAC-5-20201022</u>	0.0078		ug/L	0.0020
10/26/2020 19:44	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
10/26/2020 19:44	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
10/26/2020 19:44	Perfluorooctanesulfonic acid (PFOS)		0.0037		ug/L	0.0020
10/26/2020 19:44	Perfluorooctanoic acid (PFOA)		0.0069		ug/L	0.0020
10/26/2020 19:53	Perfluorobutanesulfonic acid (PFBS)	202010220312 <u>GAC-6-20201022</u>	0.014		ug/L	0.0020
10/26/2020 19:53	Perfluorohexanoic acid (PFHxA)		0.0097		ug/L	0.0020
10/26/2020 20:14	Perfluorobutanesulfonic acid (PFBS)	202010220313 <u>GAC-7-20201022</u>	0.010		ug/L	0.0020
10/26/2020 20:14	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
10/26/2020 20:14	Perfluorohexanoic acid (PFHxA)		0.0077		ug/L	0.0020
10/26/2020 20:14	Perfluorooctanoic acid (PFOA)		0.0048		ug/L	0.0020
10/26/2020 20:25	Perfluorobutanesulfonic acid (PFBS)	202010220314 <u>GAC-8-20201022</u>	0.0034		ug/L	0.0020
10/26/2020 20:25	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
10/26/2020 20:34	Perfluorohexanoic acid (PFHxA)	202010220315 <u>IX-5-20201022</u>	0.0046		ug/L	0.0020
10/26/2020 20:44	Perfluorohexanoic acid (PFHxA)	202010220316 <u>IX-6-20201022</u>	0.0068		ug/L	0.0020
10/26/2020 20:54	Perfluoroheptanoic acid (PFHpA)	202010220317 <u>IX-7-20201022</u>	0.0038		ug/L	0.0020
10/26/2020 20:54	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
10/26/2020 20:54	Perfluorooctanoic acid (PFOA)		0.0025		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
Fax: (626) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 899759
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Samples Received on:
10/22/2020 1438

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202010220318	<u>IX-8-20201022</u>				
10/26/2020 21:03	Perfluoroheptanoic acid (PFHpA)		0.0026		ug/L	0.0020
10/26/2020 21:03	Perfluorohexanoic acid (PFHxA)		0.0070		ug/L	0.0020

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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20201022 (202010220303)					Sampled on 10/22/2020 0930				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorodecanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	13C2-PFDA	99	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	13C2-PFHxA	109	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	13C3-HFPO-DA	98	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	d3-NMeFOSAA	97	%		1
10/22/20	10/26/20 17:27	1283169	1284020	(EPA 537.1)	d5-NEtFOSAA	88	%		1

GAC-2-20201022 (202010220304)					Sampled on 10/22/2020 0933				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	13C2-PFDA	91	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	13C2-PFHxA	100	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	13C3-HFPO-DA	89	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	d3-NMeFOSAA	90	%		1
10/22/20	10/26/20 17:37	1283169	1284020	(EPA 537.1)	d5-NEtFOSAA	86	%		1

GAC-3-20201022 (202010220305)

Sampled on 10/22/2020 0936

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	13C2-PFDA	93	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	13C2-PFHxA	97	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	95	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	107	%		1
10/23/20	10/26/20 19:06	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	85	%		1

GAC-4-20201022 (202010220306)

Sampled on 10/22/2020 0939

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	13C2-PFDA	90	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	94	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	106	%		1
10/23/20	10/26/20 19:15	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	81	%		1

IX-1-20201022 (202010220307)

Sampled on 10/22/2020 0942

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.

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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	13C2-PFDA	90	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	13C2-PFHxA	94	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	94	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	109	%		1
10/23/20	10/26/20 18:08	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	79	%		1

IX-2-20201022 (202010220308)

Sampled on 10/22/2020 0945

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	13C2-PFDA	93	%		1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	92	%		1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	109	%		1

Rounding on totals after summation.
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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 18:27	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	84	%		1
IX-3-20201022 (202010220309)					Sampled on 10/22/2020 0948				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	13C2-PFDA	90	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	94	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	105	%		1
10/23/20	10/26/20 19:25	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	81	%		1

IX-4-20201022 (202010220310)					Sampled on 10/22/2020 0951				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	13C2-PFDA	90	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	95	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	104	%		1
10/23/20	10/26/20 19:34	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	84	%		1

GAC-5-20201022 (202010220311)

Sampled on 10/22/2020 1130

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0078	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0037	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0069	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	13C2-PFDA	93	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	93	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	104	%		1
10/23/20	10/26/20 19:44	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	82	%		1

GAC-6-20201022 (202010220312)

Sampled on 10/22/2020 1133

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.014	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0097	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	13C2-PFDA	91	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	13C2-PFHxA	95	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	93	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	103	%		1
10/23/20	10/26/20 19:53	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	83	%		1

GAC-7-20201022 (202010220313)

Sampled on 10/22/2020 1136

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0077	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0048	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	13C2-PFDA	94	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	13C2-PFHxA	97	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	95	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	94	%		1
10/23/20	10/26/20 20:14	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	85	%		1

GAC-8-20201022 (202010220314)

Sampled on 10/22/2020 1139

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0034	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	13C2-PFDA	88	%		1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	13C2-PFHxA	94	%		1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	92	%		1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	94	%		1

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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 20:25	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	80	%		1
IX-5-20201022 (202010220315)					Sampled on 10/22/2020 1142				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	13C2-PFDA	88	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	13C2-PFHxA	101	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	97	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/23/20	10/26/20 20:34	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	78	%		1

IX-6-20201022 (202010220316)					Sampled on 10/22/2020 1145				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	13C2-PFDA	91	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	13C2-PFHxA	98	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	96	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	95	%		1
10/23/20	10/26/20 20:44	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	83	%		1

IX-7-20201022 (202010220317)

Static ID: 537.1

Sampled on 10/22/2020 1148

EPA 537.1 - EPA Method 537.1

10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0025	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	13C2-PFDA	88	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	13C2-PFHxA	99	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	95	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	94	%		1
10/23/20	10/26/20 20:54	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	81	%		1

IX-8-20201022 (202010220318)

Sampled on 10/22/2020 1151

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0050	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0026	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0070	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 10/22/2020 1438

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	13C2-PFDA	87	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	13C2-PFHxA	97	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	13C3-HFPO-DA	96	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	d3-NMeFOSAA	91	%		1
10/23/20	10/26/20 21:03	1283240	1284024	(EPA 537.1)	d5-NEtFOSAA	79	%		1

Rounding on totals after summation.
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Water Replenishment District

EPA Method 537.1

Prep Batch: 1283169 Analytical Batch: 1284020

202010220303 GAC-1-20201022
202010220304 GAC-2-20201022

Analysis Date: 10/26/2020

Analyzed by: SZZ

Analyzed by: SZZ

EPA Method 537.1

Prep Batch: 1283240 Analytical Batch: 1284024

202010220305 GAC-3-20201022
202010220306 GAC-4-20201022
202010220307 IX-1-20201022
202010220308 IX-2-20201022
202010220309 IX-3-20201022
202010220310 IX-4-20201022
202010220311 GAC-5-20201022
202010220312 GAC-6-20201022
202010220313 GAC-7-20201022
202010220314 GAC-8-20201022
202010220315 IX-5-20201022
202010220316 IX-6-20201022
202010220317 IX-7-20201022
202010220318 IX-8-20201022

Analysis Date: 10/26/2020

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1283169 Analytical Batch: 1284020					Analysis Date: 10/26/2020				
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0219	ug/L	93	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0231	ug/L	98	(70-130)	30	5.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00177	ug/L	94	(50-150)		
MS_202010220027	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00184	ug/L	98	(50-150)		
MSD_202010220027	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00186	ug/L	99	(50-150)	50	0.85
LCS1	13C2-PFDA (S)		100	95.7	%	96	(70-130)		
LCS2	13C2-PFDA (S)		100	91.2	%	91	(70-130)		
MBLK	13C2-PFDA (S)			101	%	101	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	99.8	%	100	(70-130)		
MS_202010220027	13C2-PFDA (S)		100	93.1	%	93	(70-130)		
MSD_202010220027	13C2-PFDA (S)		100	96.8	%	97	(70-130)		
LCS1	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS2	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			114	%	114	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MS_202010220027	13C2-PFHxA (S)		100	104	%	104	(70-130)		
MSD_202010220027	13C2-PFHxA (S)		100	106	%	106	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	91.0	%	91	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	92.4	%	92	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			93.1	%	93	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	92.2	%	92	(50-150)		
MS_202010220027	13C2-PFOA- IS#1 (I)		100	93.4	%	93	(50-150)		
MSD_202010220027	13C2-PFOA- IS#1 (I)		100	94.7	%	95	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	99.7	%	100	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	98.9	%	99	(70-130)		
MBLK	13C3-HFPO-DA (S)			100	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
MS_202010220027	13C3-HFPO-DA (S)		100	91.7	%	92	(70-130)		
MSD_202010220027	13C3-HFPO-DA (S)		100	96.1	%	96	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	97.6	%	98	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	96.7	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			97.5	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.2	%	97	(50-150)		
MS_202010220027	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202010220027	13C4-PFOS- IS#2 (I)		100	98.1	%	98	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0286	ug/L	121	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0276	ug/L	117	(70-130)	30	3.6
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00225	ug/L	119	(50-150)		
MS_202010220027	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00223	ug/L	118	(50-150)		
MSD_202010220027	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00221	ug/L	117	(50-150)	50	0.82
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0248	ug/L	106	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0253	ug/L	109	(70-130)	30	2.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00195	ug/L	105	(50-150)		
MS_202010220027	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00203	ug/L	109	(50-150)		
MSD_202010220027	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00202	ug/L	108	(50-150)	50	0.47
LCS1	d3-NMeFOSAA (I)		100	84.4	%	84	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	85.4	%	85	(50-150)		
MBLK	d3-NMeFOSAA (I)			96.7	%	97	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	95.5	%	95	(50-150)		
MS_202010220027	d3-NMeFOSAA (I)		100	93.5	%	93	(50-150)		
MSD_202010220027	d3-NMeFOSAA (I)		100	94.8	%	95	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	88.7	%	89	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	88.1	%	88	(70-130)		
MBLK	d5-NEtFOSAA (S)			88.7	%	89	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	89.4	%	89	(70-130)		
MS_202010220027	d5-NEtFOSAA (S)		100	85.0	%	85	(70-130)		
MSD_202010220027	d5-NEtFOSAA (S)		100	91.2	%	91	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0275	ug/L	110	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0283	ug/L	113	(70-130)	30	2.9
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010220027	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202010220027	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00219	ug/L	110	(50-150)	50	1.6
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0272	ug/L	109	(70-130)	30	0.73
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00218	ug/L	109	(50-150)		
MS_202010220027	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00207	ug/L	103	(50-150)		
MSD_202010220027	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00212	ug/L	106	(50-150)	50	2.5
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0266	ug/L	106	(70-130)	30	1.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00216	ug/L	108	(50-150)		
MS_202010220027	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00224	ug/L	110	(50-150)		
MSD_202010220027	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00214	ug/L	105	(50-150)	50	4.5
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0247	ug/L	112	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0251	ug/L	113	(70-130)	30	1.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00203	ug/L	115	(50-150)		
MS_202010220027	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00202	ug/L	114	(50-150)		
MSD_202010220027	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00206	ug/L	116	(50-150)	50	2.0
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0270	ug/L	108	(70-130)	30	4.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202010220027	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00227	ug/L	111	(50-150)		
MSD_202010220027	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00228	ug/L	111	(50-150)	50	0.50
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0261	ug/L	104	(70-130)	30	4.5
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202010220027	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00229	ug/L	114	(50-150)		
MSD_202010220027	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00216	ug/L	108	(50-150)	50	5.7
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0305	ug/L	122	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0294	ug/L	118	(70-130)	30	3.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00253	ug/L	126	(50-150)		
MS_202010220027	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00259	ug/L	128	(50-150)		
MSD_202010220027	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00246	ug/L	122	(50-150)	50	4.9
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0258	ug/L	113	(70-130)	30	2.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00212	ug/L	117	(50-150)		
MS_202010220027	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00210	ug/L	115	(50-150)		
MSD_202010220027	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00208	ug/L	114	(50-150)	50	1.2
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0305	ug/L	122	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0308	ug/L	123	(70-130)	30	0.98
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00248	ug/L	124	(50-150)		
MS_202010220027	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00261	ug/L	127	(50-150)		
MSD_202010220027	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00260	ug/L	127	(50-150)	50	0.43
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0295	ug/L	118	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0288	ug/L	115	(70-130)	30	2.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00245	ug/L	123	(50-150)		
MS_202010220027	Perfluorononanoic acid (PFNA)	ND	0.002	0.00246	ug/L	122	(50-150)		
MSD_202010220027	Perfluorononanoic acid (PFNA)	ND	0.002	0.00234	ug/L	116	(50-150)	50	4.4
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0239	ug/L	103	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0256	ug/L	111	(70-130)	30	6.9
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00205	ug/L	111	(50-150)		
MS_202010220027	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00210	ug/L	111	(50-150)		
MSD_202010220027	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00206	ug/L	108	(50-150)	50	2.0
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0294	ug/L	118	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0292	ug/L	117	(70-130)	30	0.68
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00250	ug/L	125	(50-150)		
MS_202010220027	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00250	ug/L	119	(50-150)		
MSD_202010220027	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00248	ug/L	118	(50-150)	50	0.67
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0265	ug/L	106	(70-130)	30	3.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010220027	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00228	ug/L	112	(50-150)		
MSD_202010220027	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00222	ug/L	109	(50-150)	50	2.9
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0250	ug/L	100	(70-130)	30	6.2
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	101	(50-150)		
MS_202010220027	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00213	ug/L	106	(50-150)		
MSD_202010220027	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00210	ug/L	105	(50-150)	50	1.3
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0268	ug/L	107	(70-130)	30	1.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202010220027	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00229	ug/L	115	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202010220027	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00223	ug/L	112	(50-150)	50	2.7

EPA Method 537.1 by EPA 537.1

Prep Batch: 1283240 Analytical Batch: 1284024

Analysis Date: 10/26/2020

DUP_202010220308	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0265	ug/L	113	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0242	ug/L	103	(70-130)	30	9.1
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00210	ug/L	112	(50-150)		
MS_202010220307	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00234	ug/L	125	(50-150)		
DUP_202010220308	13C2-PFDA (S)			92.5	%	93	(70-130)		
LCS1	13C2-PFDA (S)		100	90.6	%	91	(70-130)		
LCS2	13C2-PFDA (S)		100	91.2	%	91	(70-130)		
MBLK	13C2-PFDA (S)			93.4	%	93	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	92.2	%	92	(70-130)		
MS_202010220307	13C2-PFDA (S)		100	92.9	%	93	(70-130)		
DUP_202010220308	13C2-PFHxA (S)			95.3	%	95	(70-130)		
LCS1	13C2-PFHxA (S)		100	95.2	%	95	(70-130)		
LCS2	13C2-PFHxA (S)		100	99.0	%	99	(70-130)		
MBLK	13C2-PFHxA (S)			99.1	%	99	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	95.8	%	96	(70-130)		
MS_202010220307	13C2-PFHxA (S)		100	96.7	%	97	(70-130)		
DUP_202010220308	13C2-PFOA- IS#1 (I)			100	%	100	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	99.8	%	100	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	86.6	%	87	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			99.6	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MS_202010220307	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
DUP_202010220308	13C3-HFPO-DA (S)			91.6	%	92	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	93.2	%	93	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	99.5	%	100	(70-130)		
MBLK	13C3-HFPO-DA (S)			94.8	%	95	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	93.3	%	93	(70-130)		
MS_202010220307	13C3-HFPO-DA (S)		100	92.5	%	92	(70-130)		
DUP_202010220308	13C4-PFOS- IS#2 (I)			108	%	108	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	96.7	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			104	%	104	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MS_202010220307	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202010220308	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0283	ug/L	120	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0288	ug/L	122	(70-130)	30	1.8
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00241	ug/L	127	(50-150)		
MS_202010220307	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00258	ug/L	137	(50-150)		
DUP_202010220308	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0260	ug/L	111	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0253	ug/L	109	(70-130)	30	2.7
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00216	ug/L	116	(50-150)		
MS_202010220307	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00226	ug/L	122	(50-150)		
DUP_202010220308	d3-NMeFOSAA (I)			105	%	105	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	80.2	%	80	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MS_202010220307	d3-NMeFOSAA (I)		100	106	%	107	(50-150)		
DUP_202010220308	d5-NEtFOSAA (S)			83.4	%	83	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	79.3	%	79	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	83.3	%	83	(70-130)		
MBLK	d5-NEtFOSAA (S)			83.8	%	84	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	82.6	%	83	(70-130)		
MS_202010220307	d5-NEtFOSAA (S)		100	83.6	%	84	(70-130)		
DUP_202010220308	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0291	ug/L	116	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0308	ug/L	123	(70-130)	30	5.7
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.001667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00240	ug/L	120	(50-150)		
MS_202010220307	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00259	ug/L	130	(50-150)		
DUP_202010220308	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0261	ug/L	104	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0265	ug/L	106	(70-130)	30	1.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00216	ug/L	108	(50-150)		
MS_202010220307	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00254	ug/L	127	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 899759
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202010220308	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0270	ug/L	108	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)	30	1.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00232	ug/L	116	(50-150)		
MS_202010220307	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00257	ug/L	128	(50-150)		
DUP_202010220308	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0256	ug/L	116	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0252	ug/L	114	(70-130)	30	1.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00208	ug/L	118	(50-150)		
MS_202010220307	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00219	ug/L	124	(50-150)		
DUP_202010220308	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0287	ug/L	115	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0283	ug/L	113	(70-130)	30	1.4
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00257	ug/L	128	(50-150)		
MS_202010220307	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00279	ug/L	133	(50-150)		
DUP_202010220308	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0274	ug/L	109	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0264	ug/L	106	(70-130)	30	3.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202010220307	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00252	ug/L	126	(50-150)		
DUP_202010220308	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0311	ug/L	125	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0308	ug/L	123	(70-130)	30	0.97
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00265	ug/L	133	(50-150)		
MS_202010220307	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00341	ug/L	144	(50-150)		
DUP_202010220308	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0265	ug/L	116	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0258	ug/L	113	(70-130)	30	2.7
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00226	ug/L	124	(50-150)		
MS_202010220307	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00242	ug/L	132	(50-150)		
DUP_202010220308	Perfluorohexanoic acid (PFHxA)	0.0040		0.00402	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0296	ug/L	118	(70-130)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0311	ug/L	124	(70-130)	30	4.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00251	ug/L	125	(50-150)		
MS_202010220307	Perfluorohexanoic acid (PFHxA)	0.0024	0.002	0.00506	ug/L	131	(50-150)		
DUP_202010220308	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0299	ug/L	120	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0301	ug/L	120	(70-130)	30	0.67
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00246	ug/L	123	(50-150)		
MS_202010220307	Perfluorononanoic acid (PFNA)	ND	0.002	0.00286	ug/L	136	(50-150)		
DUP_202010220308	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0268	ug/L	116	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0257	ug/L	111	(70-130)	30	4.2
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00220	ug/L	119	(50-150)		
MS_202010220307	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00240	ug/L	123	(50-150)		
DUP_202010220308	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0304	ug/L	122	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0295	ug/L	118	(70-130)	30	3.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00263	ug/L	131	(50-150)		
MS_202010220307	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00405	ug/L	134	(50-150)		
DUP_202010220308	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0310	ug/L	124	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0292	ug/L	117	(70-130)	30	6.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00299	ug/L	150	(50-150)		
MS_202010220307	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00332	ug/L	139	(50-150)		
DUP_202010220308	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0261	ug/L	104	(70-130)	30	7.7
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202010220307	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00256	ug/L	128	(50-150)		
DUP_202010220308	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0281	ug/L	112	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0276	ug/L	110	(70-130)	30	1.8
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 899759
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00239	ug/L	120	(50-150)		
MS_202010220307	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00262	ug/L	131	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/28/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 10/28/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____

Project: _____
 Phone #: _____
 Date Received: _____
 Sampled By: _____
 Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
 P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 10/28/2020

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 902203
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 902203
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **November 05, 2020 at 1203**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202011050476</u>	GAC-1 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0900
<u>202011050477</u>	GAC-2 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0903
<u>202011050478</u>	GAC-3 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0906
<u>202011050479</u>	GAC-4 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0909
<u>202011050480</u>	IX-1 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0912
<u>202011050481</u>	IX-2 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0915
<u>202011050482</u>	IX-3 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0918
<u>202011050483</u>	IX-4 - 20201105 Static ID: 537.1 @537.1	11/05/2020 0921
<u>202011050514</u>	GAC-5 - 20201105 @537.1	11/05/2020 1040
<u>202011050515</u>	GAC-6 - 20201105 @537.1	11/05/2020 1043
<u>202011050516</u>	GAC-7 - 20201105 @537.1	11/05/2020 1046
<u>202011050517</u>	GAC-8 - 20201105	11/05/2020 1049

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 902203
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **November 05, 2020 at 1203**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202011050518	IX-5 - 20201105	11/05/2020 1050
	@537.1	
202011050519	IX-6 - 20201105	11/05/2020 1053
	@537.1	
202011050520	IX-7 - 20201105	11/05/2020 1056
	@537.1	
202011050521	IX-8 - 20201105	11/05/2020 1059
	@537.1	

Test Description

@537.1 -- EPA Method 537.1

902002

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302								
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang								
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) BC								
LABORATORY: Eurofins Eaton Analytical		REQUESTED ANALYSES Please check box or fill in blank as needed.										
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD												
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rtorres@gsi-net.com; Provide EDD of sample results												
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	Preserved	Unpreserved	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME									
	GAC-1-20201105	11/5/20	900	Water	2				X			
	GAC-2-20201105		903	Water	1				X			
	GAC-3-20201105		906	Water					X			
	GAC-4-20201105		909	Water					X			
	IX-1-20201105		912	Water					X			
	IX-2-20201105		915	Water					X			
	IX-3-20201105		918	Water					X			
	IX-4-20201105		921	Water					X			
	LINE			Water					X	X	X	
	LINE-DIIP			Water					X	X	X	
	GAC-5-20201105	11/5/20	1040	Water	2				X			
	GAC-6-20201105		1043	Water	1				X			
	GAC-7-20201105		1046	Water					X			
	GAC-8-20201105		1049	Water					X			
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>		Date: 11/5/2020		Time: 1201		
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>		Date: 11-5-20		Time: 1203		
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>		Date:		Time:		



CHAIN-OF-CUSTODY **C**ORD
Date: 11/15/2020
Page 2 of 2

502 203

FROM: GSI Environmental Inc.
19200 Von Karman Ave, Suite 800
Irvine, CA 92612
(949) 679-1070

PROJECT NAME: WRD Pilot
PROJECT CONTACT: Miae Jeon
GLOBAL ID:

PROJECT NO.: 5302
LAB CONTACT: Sophia Liang
SAMPLER(S): (PRINT) **BC**

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

LABORATORY: Eurofins Eaton Analytical

TURNAROUND TIME:
 SAME DAY 24 HR 48 HR
 72 HR 5 DAYS STANDARD

SPECIAL INSTRUCTIONS:
Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com;
Provide EDD of sample results

REQUESTED ANALYSES
Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered			PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME			Unpreserved	Preserved					
	IX-5 - 20201105	11/15/20	1050	Water	2				X			
	IX-6 - 20201105		1053	Water					X			
	IX-7 - 20201105		1056	Water					X			
	IX-8 - 20201105		1059	Water					X			
	MB-INF			Water					X	X	X	
	MB-INF-DUP			Water					X	X	X	
	EB			Water					X	X	X	

Received by: (Signature) [Signature] Date: 11/15/2020 Time: 1201

Received by: (Signature) [Signature] Date: 11/15-20 Time: 1203

Received by: (Signature) [Signature] Date: Date: Time:



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number 902203

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616 (Observation = 15.4 °C) (Corr. Factor = -0.3) (Final = 15.1 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA and Radon Headspace: _____

No Samples with Headspace:

Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251.662), 506, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, international clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace. (i.e. potential sampling errors): _____

RECEIVED BY <u>Chris Beck</u>	SIGNATURE <u>Chris Beck</u>	COMPAN/VITILE <u>Eurofins Eaton Analytical</u>	DATE <u>11-5-20</u>	TIME <u>1203</u>
-------------------------------	-----------------------------	--	---------------------	------------------

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 902203
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202011050480 <u>IX-1 - 20201105</u>						
11/09/2020 20:39	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
11/09/2020 20:39	Perfluorooctanoic acid (PFOA)		0.0025		ug/L	0.0020
202011050481 <u>IX-2 - 20201105</u>						
11/09/2020 20:49	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
202011050482 <u>IX-3 - 20201105</u>						
11/09/2020 20:58	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
202011050483 <u>IX-4 - 20201105</u>						
11/09/2020 21:08	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
202011050514 <u>GAC-5 - 20201105</u>						
11/09/2020 21:17	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
11/09/2020 21:17	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
11/09/2020 21:17	Perfluorohexanesulfonic acid (PFHxS)		0.0020		ug/L	0.0020
11/09/2020 21:17	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
11/09/2020 21:17	Perfluorooctanesulfonic acid (PFOS)		0.0041		ug/L	0.0020
11/09/2020 21:17	Perfluorooctanoic acid (PFOA)		0.0075		ug/L	0.0020
202011050515 <u>GAC-6 - 20201105</u>						
11/09/2020 21:27	Perfluorobutanesulfonic acid (PFBS)		0.016		ug/L	0.0020
11/09/2020 21:27	Perfluorohexanoic acid (PFHxA)		0.011		ug/L	0.0020
202011050516 <u>GAC-7 - 20201105</u>						
11/09/2020 21:37	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
11/09/2020 21:37	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
11/09/2020 21:37	Perfluorohexanoic acid (PFHxA)		0.0080		ug/L	0.0020
11/09/2020 21:37	Perfluorooctanoic acid (PFOA)		0.0056		ug/L	0.0020
202011050517 <u>GAC-8 - 20201105</u>						
11/09/2020 21:46	Perfluorobutanesulfonic acid (PFBS)		0.0049		ug/L	0.0020
11/09/2020 21:46	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
202011050518 <u>IX-5 - 20201105</u>						
11/10/2020 03:27	Perfluorohexanoic acid (PFHxA)		0.0046		ug/L	0.0020
11/10/2020 03:27	Perfluorooctanoic acid (PFOA)		0.0021		ug/L	0.0020
202011050519 <u>IX-6 - 20201105</u>						
11/10/2020 03:37	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
11/10/2020 03:37	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 902203
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202011050520	<u>IX-7 - 20201105</u>			
11/10/2020 03:47	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
11/10/2020 03:47	Perfluorohexanoic acid (PFHxA)		0.0067		ug/L	0.0020
11/10/2020 03:47	Perfluorooctanoic acid (PFOA)		0.0031		ug/L	0.0020
		202011050521	<u>IX-8 - 20201105</u>			
11/10/2020 03:56	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
11/10/2020 03:56	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020

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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1 - 20201105 (202011050476)					Sampled on 11/05/2020 0900				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	13C2-PFDA	98	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	13C2-PFHxA	105	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	97	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/06/20	11/09/20 19:49	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	95	%		1

GAC-2 - 20201105 (202011050477)					Sampled on 11/05/2020 0903				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	13C2-PFDA	98	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	13C2-PFHxA	109	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	96	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/06/20	11/09/20 19:58	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	91	%		1

GAC-3 - 20201105 (202011050478)

Sampled on 11/05/2020 0906

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	13C2-PFDA	102	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	13C2-PFHxA	113	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	89	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	102	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	95	%		1
11/06/20	11/09/20 20:19	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-4 - 20201105 (202011050479)

Sampled on 11/05/2020 0909

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	13C2-PFDA	102	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	13C2-PFHxA	110	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	89	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	102	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/06/20	11/09/20 20:30	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	94	%		1

IX-1 - 20201105 (202011050480)

Static ID: 537.1

Sampled on 11/05/2020 0912

EPA 537.1 - EPA Method 537.1

11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0025	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	13C2-PFDA	101	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	13C2-PFHxA	108	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	101	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/06/20	11/09/20 20:39	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	94	%		1

IX-2 - 20201105 (202011050481)

Sampled on 11/05/2020 0915

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	13C2-PFDA	94	%		1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	13C2-PFHxA	103	%		1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	97	%		1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	97	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 20:49	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	94	%		1
IX-3 - 20201105 (202011050482)					Sampled on 11/05/2020 0918				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	13C2-PFDA	99	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	13C2-PFHxA	105	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	96	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/06/20	11/09/20 20:58	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	93	%		1

IX-4 - 20201105 (202011050483)

Sampled on 11/05/2020 0921

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	13C2-PFDA	102	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	13C2-PFHxA	105	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	100	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/06/20	11/09/20 21:08	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	95	%		1

GAC-5 - 20201105 (202011050514)

Sampled on 11/05/2020 1040

EPA 537.1 - EPA Method 537.1

11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0020	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0041	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0075	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	13C2-PFDA	101	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	13C2-PFHxA	106	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	98	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/06/20	11/09/20 21:17	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	94	%		1

GAC-6 - 20201105 (202011050515)

Sampled on 11/05/2020 1043

EPA 537.1 - EPA Method 537.1

11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.016	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.011	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	13C2-PFDA	100	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	13C2-PFHxA	109	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	91	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	99	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/06/20	11/09/20 21:27	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	96	%		1

GAC-7 - 20201105 (202011050516)

Sampled on 11/05/2020 1046

EPA 537.1 - EPA Method 537.1

11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0080	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0056	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	13C2-PFDA	97	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	13C2-PFHxA	104	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	98	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/06/20	11/09/20 21:37	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	96	%		1

GAC-8 - 20201105 (202011050517)

Sampled on 11/05/2020 1049

EPA 537.1 - EPA Method 537.1

11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0049	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	13C2-PFDA	99	%		1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	13C2-PFHxA	105	%		1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	13C3-HFPO-DA	94	%		1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	d3-NMeFOSAA	97	%		1

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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/06/20	11/09/20 21:46	1286328	1287138	(EPA 537.1)	d5-NEtFOSAA	95	%		1
IX-5 - 20201105 (202011050518)					Sampled on 11/05/2020 1050				
EPA 537.1 - EPA Method 537.1									
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0046	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0021	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	13C2-PFDA	94	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	13C2-PFHxA	96	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	13C3-HFPO-DA	95	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/07/20	11/10/20 03:27	1286664	1287084	(EPA 537.1)	d5-NEtFOSAA	93	%		1

IX-6 - 20201105 (202011050519)

Sampled on 11/05/2020 1053

EPA 537.1 - EPA Method 537.1

11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	13C2-PFDA	92	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	13C2-PFHxA	94	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	13C3-HFPO-DA	91	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/07/20	11/10/20 03:37	1286664	1287084	(EPA 537.1)	d5-NETFOSAA	93	%		1

IX-7 - 20201105 (202011050520)

Sampled on 11/05/2020 1056

EPA 537.1 - EPA Method 537.1

11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0067	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0031	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	13C2-PFDA	100	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	13C2-PFHxA	96	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	13C3-HFPO-DA	96	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/07/20	11/10/20 03:47	1286664	1287084	(EPA 537.1)	d5-NEtFOSAA	95	%		1

IX-8 - 20201105 (202011050521)

Sampled on 11/05/2020 1059

EPA 537.1 - EPA Method 537.1

11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 902203
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/05/2020 1203

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	13C2-PFDA	95	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	13C2-PFHxA	96	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	13C3-HFPO-DA	96	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	d3-NMeFOSAA	101	%		1
11/07/20	11/10/20 03:56	1286664	1287084	(EPA 537.1)	d5-NEtFOSAA	88	%		1

Rounding on totals after summation.
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Report: 902203
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Water Replenishment District

EPA Method 537.1

Prep Batch: 1286664 Analytical Batch: 1287084

202011050518	IX-5 - 20201105
202011050519	IX-6 - 20201105
202011050520	IX-7 - 20201105
202011050521	IX-8 - 20201105

Analysis Date: 11/10/2020

Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ
Analyzed by: SZZ

EPA Method 537.1

Prep Batch: 1286328 Analytical Batch: 1287138

202011050476	GAC-1 - 20201105
202011050477	GAC-2 - 20201105
202011050478	GAC-3 - 20201105
202011050479	GAC-4 - 20201105
202011050480	IX-1 - 20201105
202011050481	IX-2 - 20201105
202011050482	IX-3 - 20201105
202011050483	IX-4 - 20201105
202011050514	GAC-5 - 20201105
202011050515	GAC-6 - 20201105
202011050516	GAC-7 - 20201105
202011050517	GAC-8 - 20201105

Analysis Date: 11/09/2020

Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1286664 Analytical Batch: 1287084					Analysis Date: 11/10/2020				
DUP_202011060270	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0245	ug/L	104	(70-130)	30	3.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00184	ug/L	98	(50-150)		
MS_202011060284	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00179	ug/L	95	(50-150)		
DUP_202011060270	13C2-PFDA (S)			85.8	%	86	(70-130)		
LCS1	13C2-PFDA (S)		100	91.1	%	91	(70-130)		
LCS2	13C2-PFDA (S)		100	90.0	%	90	(70-130)		
MBLK	13C2-PFDA (S)			91.7	%	92	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	90.4	%	90	(70-130)		
MS_202011060284	13C2-PFDA (S)		100	89.0	%	89	(70-130)		
DUP_202011060270	13C2-PFHxA (S)			95.6	%	96	(70-130)		
LCS1	13C2-PFHxA (S)		100	98.1	%	98	(70-130)		
LCS2	13C2-PFHxA (S)		100	98.2	%	98	(70-130)		
MBLK	13C2-PFHxA (S)			97.2	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	95.2	%	95	(70-130)		
MS_202011060284	13C2-PFHxA (S)		100	97.0	%	97	(70-130)		
DUP_202011060270	13C2-PFOA- IS#1 (I)			99.2	%	99	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	96.7	%	97	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	99.5	%	100	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			97.7	%	98	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.6	%	100	(50-150)		
MS_202011060284	13C2-PFOA- IS#1 (I)		100	99.2	%	99	(50-150)		
DUP_202011060270	13C3-HFPO-DA (S)			90.4	%	90	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	93.3	%	93	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	94.2	%	94	(70-130)		
MBLK	13C3-HFPO-DA (S)			94.2	%	94	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	90.8	%	91	(70-130)		
MS_202011060284	13C3-HFPO-DA (S)		100	91.3	%	91	(70-130)		
DUP_202011060270	13C4-PFOS- IS#2 (I)			93.0	%	93	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	95.0	%	95	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	96.9	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			94.6	%	95	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	94.8	%	95	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202011060284	13C4-PFOS- IS#2 (I)		100	95.6	%	96	(50-150)		
DUP_202011060270	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0259	ug/L	110	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0263	ug/L	111	(70-130)	30	1.5
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00200	ug/L	106	(50-150)		
MS_202011060284	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00201	ug/L	105	(50-150)		
DUP_202011060270	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0250	ug/L	107	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0254	ug/L	109	(70-130)	30	1.6
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00189	ug/L	102	(50-150)		
MS_202011060284	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00190	ug/L	102	(50-150)		
DUP_202011060270	d3-NMeFOSAA (I)			100	%	100	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	99.6	%	100	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	98.2	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			97.8	%	98	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	99.1	%	99	(50-150)		
MS_202011060284	d3-NMeFOSAA (I)		100	99.0	%	99	(50-150)		
DUP_202011060270	d5-NEtFOSAA (S)			83.8	%	84	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	85.4	%	85	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	89.6	%	90	(70-130)		
MBLK	d5-NEtFOSAA (S)			87.6	%	88	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	85.9	%	86	(70-130)		
MS_202011060284	d5-NEtFOSAA (S)		100	84.4	%	84	(70-130)		
DUP_202011060270	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0268	ug/L	107	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0272	ug/L	109	(70-130)	30	1.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00198	ug/L	99	(50-150)		
MS_202011060284	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00208	ug/L	104	(50-150)		
DUP_202011060270	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0247	ug/L	99	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0271	ug/L	108	(70-130)	30	9.3
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00199	ug/L	100	(50-150)		
MS_202011060284	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00196	ug/L	97	(50-150)		
DUP_202011060270	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 902203
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0254	ug/L	102	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0261	ug/L	104	(70-130)	30	2.7
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00190	ug/L	95	(50-150)		
MS_202011060284	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00193	ug/L	95	(50-150)		
DUP_202011060270	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0241	ug/L	109	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0243	ug/L	110	(70-130)	30	0.83
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00189	ug/L	107	(50-150)		
MS_202011060284	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00192	ug/L	108	(50-150)		
DUP_202011060270	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0274	ug/L	110	(70-130)	30	3.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202011060284	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00203	ug/L	100	(50-150)		
DUP_202011060270	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0258	ug/L	103	(70-130)	30	3.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00186	ug/L	93	(50-150)		
MS_202011060284	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00176	ug/L	88	(50-150)		
DUP_202011060270	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0284	ug/L	114	(70-130)	30	0.35
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00216	ug/L	108	(50-150)		
MS_202011060284	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00232	ug/L	114	(50-150)		
DUP_202011060270	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0251	ug/L	110	(70-130)	30	1.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00195	ug/L	107	(50-150)		
MS_202011060284	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00197	ug/L	106	(50-150)		
DUP_202011060270	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0271	ug/L	108	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0276	ug/L	111	(70-130)	30	1.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 902203
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00208	ug/L	104	(50-150)		
MS_202011060284	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00224	ug/L	96	(50-150)		
DUP_202011060270	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0276	ug/L	111	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0278	ug/L	111	(70-130)	30	0.72
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00215	ug/L	108	(50-150)		
MS_202011060284	Perfluorononanoic acid (PFNA)	ND	0.002	0.00217	ug/L	107	(50-150)		
DUP_202011060270	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0237	ug/L	103	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0241	ug/L	104	(70-130)	30	1.7
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00192	ug/L	104	(50-150)		
MS_202011060284	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00192	ug/L	100	(50-150)		
DUP_202011060270	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0267	ug/L	107	(70-130)	30	1.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202011060284	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00222	ug/L	106	(50-150)		
DUP_202011060270	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0269	ug/L	107	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0279	ug/L	112	(70-130)	30	3.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00224	ug/L	112	(50-150)		
MS_202011060284	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00148	ug/L	70	(50-150)		
DUP_202011060270	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0264	ug/L	105	(70-130)	30	4.7
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00188	ug/L	94	(50-150)		
MS_202011060284	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00191	ug/L	95	(50-150)		
DUP_202011060270	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0271	ug/L	108	(70-130)	30	1.9
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00199	ug/L	100	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202011060284	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00198	ug/L	99	(50-150)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1286328 Analytical Batch: 1287138

Analysis Date: 11/09/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0474	ug/L	101	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0493	ug/L	105	(70-130)	30	3.9
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00215	ug/L	114	(50-150)		
MS1_202011040161	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0243	ug/L	103	(70-130)		
MSD1_202011040161	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0241	ug/L	102	(70-130)	30	0.91
LCS3	13C2-PFDA (S)		100	95.9	%	96	(70-130)		
LCS4	13C2-PFDA (S)		100	98.0	%	98	(70-130)		
MBLK	13C2-PFDA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	96.4	%	96	(70-130)		
MS1_202011040161	13C2-PFDA (S)		100	97.3	%	97	(70-130)		
MSD1_202011040161	13C2-PFDA (S)		100	97.4	%	97	(70-130)		
LCS3	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MS1_202011040161	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MSD1_202011040161	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	94.5	%	94	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			89.7	%	90	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	90.6	%	91	(50-150)		
MS1_202011040161	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
MSD1_202011040161	13C2-PFOA- IS#1 (I)		100	95.7	%	96	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	97.3	%	97	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	99.7	%	100	(70-130)		
MBLK	13C3-HFPO-DA (S)			102	%	102	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	99.0	%	99	(70-130)		
MS1_202011040161	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
MSD1_202011040161	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	100	%	101	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	96.4	%	96	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			95.3	%	95	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	93.5	%	93	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202011040161	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		
MSD1_202011040161	13C4-PFOS- IS#2 (I)		100	95.6	%	96	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0487	ug/L	100	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0498	ug/L	103	(70-130)	30	2.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00201	ug/L	106	(50-150)		
MS1_202011040161	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0252	ug/L	107	(70-130)		
MSD1_202011040161	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0244	ug/L	103	(70-130)	30	3.4
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0496	ug/L	106	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0503	ug/L	108	(70-130)	30	1.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00208	ug/L	112	(50-150)		
MS1_202011040161	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0252	ug/L	108	(70-130)		
MSD1_202011040161	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0245	ug/L	105	(70-130)	30	2.7
LCS3	d3-NMeFOSAA (I)		100	98.6	%	99	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	94.0	%	94	(50-150)		
MBLK	d3-NMeFOSAA (I)			96.6	%	97	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	96.4	%	96	(50-150)		
MS1_202011040161	d3-NMeFOSAA (I)		100	98.6	%	99	(50-150)		
MSD1_202011040161	d3-NMeFOSAA (I)		100	95.2	%	95	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	92.6	%	93	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	94.8	%	95	(70-130)		
MBLK	d5-NEtFOSAA (S)			96.5	%	96	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	95.1	%	95	(70-130)		
MS1_202011040161	d5-NEtFOSAA (S)		100	90.6	%	91	(70-130)		
MSD1_202011040161	d5-NEtFOSAA (S)		100	94.0	%	94	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0529	ug/L	106	(70-130)	30	3.5
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00212	ug/L	106	(50-150)		
MS1_202011040161	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0258	ug/L	103	(70-130)		
MSD1_202011040161	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0251	ug/L	100	(70-130)	30	2.7
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0520	ug/L	104	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0525	ug/L	105	(70-130)	30	0.96
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00201	ug/L	100	(50-150)		
MS1_202011040161	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0264	ug/L	106	(70-130)		
MSD1_202011040161	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0261	ug/L	104	(70-130)	30	1.1

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0524	ug/L	105	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0526	ug/L	105	(70-130)	30	0.38
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	105	(50-150)		
MS1_202011040161	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0260	ug/L	104	(70-130)		
MSD1_202011040161	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0257	ug/L	103	(70-130)	30	1.2
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0455	ug/L	103	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0486	ug/L	110	(70-130)	30	6.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00195	ug/L	110	(50-150)		
MS1_202011040161	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0234	ug/L	104	(70-130)		
MSD1_202011040161	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0229	ug/L	102	(70-130)	30	2.0
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0535	ug/L	107	(70-130)	30	2.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00203	ug/L	101	(50-150)		
MS1_202011040161	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0280	ug/L	112	(70-130)		
MSD1_202011040161	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0265	ug/L	106	(70-130)	30	5.4
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0521	ug/L	104	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0550	ug/L	110	(70-130)	30	5.4
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00208	ug/L	104	(50-150)		
MS1_202011040161	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0270	ug/L	108	(70-130)		
MSD1_202011040161	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0261	ug/L	104	(70-130)	30	3.4
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0541	ug/L	108	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0568	ug/L	114	(70-130)	30	4.9
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202011040161	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0285	ug/L	110	(70-130)		
MSD1_202011040161	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0276	ug/L	106	(70-130)	30	3.3
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0480	ug/L	105	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0504	ug/L	111	(70-130)	30	4.9
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00200	ug/L	110	(50-150)		
MS1_202011040161	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0247	ug/L	107	(70-130)		
MSD1_202011040161	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0248	ug/L	107	(70-130)	30	0.57
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0517	ug/L	103	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0548	ug/L	110	(70-130)	30	5.8

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 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00222	ug/L	111	(50-150)		
MS1_202011040161	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0274	ug/L	105	(70-130)		
MSD1_202011040161	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0268	ug/L	103	(70-130)	30	2.0
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0528	ug/L	106	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0533	ug/L	107	(70-130)	30	0.94
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00207	ug/L	103	(50-150)		
MS1_202011040161	Perfluorononanoic acid (PFNA)	ND	0.025	0.0278	ug/L	110	(70-130)		
MSD1_202011040161	Perfluorononanoic acid (PFNA)	ND	0.025	0.0273	ug/L	108	(70-130)	30	1.9
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0499	ug/L	108	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0499	ug/L	108	(70-130)	30	0.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00197	ug/L	106	(50-150)		
MS1_202011040161	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0255	ug/L	106	(70-130)		
MSD1_202011040161	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0256	ug/L	106	(70-130)	30	0.29
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0531	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0541	ug/L	108	(70-130)	30	1.9
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00227	ug/L	113	(50-150)		
MS1_202011040161	Perfluorooctanoic acid (PFOA)	0.0032	0.025	0.0299	ug/L	107	(70-130)		
MSD1_202011040161	Perfluorooctanoic acid (PFOA)	0.0032	0.025	0.0298	ug/L	106	(70-130)	30	0.44
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0576	ug/L	115	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0623	ug/L	125	(70-130)	30	7.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00293	ug/L	147	(50-150)		
MS1_202011040161	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0320	ug/L	128	(70-130)		
MSD1_202011040161	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0317	ug/L	127	(70-130)	30	1.1
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0504	ug/L	101	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0534	ug/L	107	(70-130)	30	5.8
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202011040161	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0270	ug/L	108	(70-130)		
MSD1_202011040161	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0263	ug/L	105	(70-130)	30	2.5
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0528	ug/L	106	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0533	ug/L	107	(70-130)	30	0.94
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00208	ug/L	104	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 902203
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202011040161	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0270	ug/L	108	(70-130)		
MSD1_202011040161	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0266	ug/L	106	(70-130)	30	1.6

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 11/10/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 11/10/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 11/10/2020

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____

Project: _____
 Phone #: _____
 Date Received: _____
 Sampled By: _____
 Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
 P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 11/10/2020

Quant Report - Page 1 of 1

Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles

REPORT REVISED,
replaces the original report.



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 904643
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 904643
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **November 19, 2020 at 1416**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202011190346</u>	GAC-1-20201119	11/19/2020 0830
	@537.1	
<u>202011190347</u>	GAC-2-20201119	11/19/2020 0833
	@537.1	
<u>202011190348</u>	GAC-3-20201119	11/19/2020 0836
	@537.1	
<u>202011190349</u>	GAC-4-20201119	11/19/2020 0839
	@537.1	
<u>202011190350</u>	IX-1-20201119	11/19/2020 0842
	@537.1	
<u>202011190351</u>	IX-2-20201119	11/19/2020 0845
	@537.1	
<u>202011190352</u>	IX-3-20201119	11/19/2020 0848
	@537.1	
<u>202011190353</u>	IX-4-20201119	11/19/2020 0851
	@537.1	
<u>202011190355</u>	GAC-1M-20201119	11/19/2020 0854
	@537.1	
<u>202011190356</u>	GAC-2M-20201119	11/19/2020 0857
	@537.1	
<u>202011190357</u>	GAC-3M-20201119	11/19/2020 0900
	@537.1	
<u>202011190358</u>	GAC-4M-20201119	11/19/2020 0903
	@537.1	
<u>202011190359</u>	IX-1M-20201119	11/19/2020 0906
	@537.1	

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 904643
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **November 19, 2020 at 1416**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202011190360</u>	IX-2M-20201119	11/19/2020 0909
	@537.1	
<u>202011190361</u>	IX-3M--20201119	11/19/2020 0912
	@537.1	
<u>202011190362</u>	IX-4M-20201119	11/19/2020 0915
	@537.1	
<u>202011190363</u>	LH-INF-20201119	11/19/2020 0918
	@537.1	
<u>202011190364</u>	IX-5-20201119	11/19/2020 1100
	@537.1	
<u>202011190365</u>	IX-6-20201119	11/19/2020 1103
	@537.1	
<u>202011190366</u>	IX-7-20201119	11/19/2020 1106
	@537.1	
<u>202011190367</u>	IX-8-20201119	11/19/2020 1109
	@537.1	
<u>202011190368</u>	GAC-5--20201119	11/19/2020 1112
	@537.1	
<u>202011190369</u>	GAC-6--20201119	11/19/2020 1115
	@537.1	
<u>202011190370</u>	GAC-7-20201119	11/19/2020 1118
	@537.1	
<u>202011190371</u>	GAC-8-20201119	11/19/2020 1121
	@537.1	
<u>202011190372</u>	IX-5M-20201119	11/19/2020 1124
	@537.1	

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 904643
Project: 0250000
Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **November 19, 2020 at 1416**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202011190373	IX-6M-20201119	11/19/2020 1127
	@537.1	
202011190374	IX-7M-20201119	11/19/2020 1130
	@537.1	
202011190375	IX-8M-20201119	11/19/2020 1133
	@537.1	
202011190376	GAC-5M-20201119	11/19/2020 1136
	@537.1	
202011190377	GAC-6M-20201119	11/19/2020 1139
	@537.1	
202011190378	GAC-7M-20201119	11/19/2020 1142
	@537.1	
202011190379	GAC-8M-20201119	11/19/2020 1145
	@537.1	
202011190380	MB-INF-20201119	11/19/2020 1148
	@537.1	

Test Description

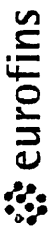
@537.1 -- EPA Method 537.1

904644

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:																			
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) Becky Chen																			
LABORATORY: Eurofins Eaton Analytical																					
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD																					
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results																					
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION		PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)	
		DATE	TIME			Unpreserved	Preserved														Field Filtered
	GAC-1-20201119	11/19/2020	0830	Water	2		X	X													
	GAC-2-20201119	11/19/2020	0833	Water	2		X	X													
	GAC-3-20201119	11/19/2020	0836	Water	2		X	X													
	GAC-4-20201119	11/19/2020	0839	Water	2		X	X													
	IX-1-20201119	11/19/2020	0842	Water	2		X	X													
	IX-2-20201119	11/19/2020	0845	Water	2		X	X													
	IX-3-20201119	11/19/2020	0848	Water	2		X	X													
	IX-4-20201119	11/19/2020	0851	Water	2		X	X													
	GAC-1M-20201119	11/19/2020	0854	Water	2		X	X													
	GAC-2M-20201119	11/19/2020	0857	Water	2		X	X													
	GAC-3M-20201119	11/19/2020	0900	Water	2		X	X													
	GAC-4M-20201119	11/19/2020	0903	Water	2		X	X													
	IX-1M-20201119	11/19/2020	0906	Water	2		X	X													
	IX-2M-20201119	11/19/2020	0909	Water	2		X	X													
	IX-3M-20201119	11/19/2020	0912	Water	2		X	X													
	IX-4M-20201119	11/19/2020	0915	Water	2		X	X													
	LH-INF-20201119	11/19/2020	0918	Water	14		X	X													
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: <u>11/19/20</u>		Time: <u>1414</u>															
Relinquished by: (Signature)		Received by: (Signature) <i>[Signature]</i>		Date: <u>11/19/20</u>		Time: <u>1416</u>															
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:															

904644

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot																				
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon																				
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:																				
LABORATORY: Eurofins Eaton Analytical		LAB CONTACT: Sophia Liang																				
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 72 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD		SAMPLER(S): (PRINT) <i>Becty Chen</i>																				
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results		REQUESTED ANALYSES Please check box or fill in blank as needed.																				
LAB USE ONLY																						
SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - Full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)		
	DATE	TIME																				
IX-5-20201119	11/19/2020	1100	Water	2				X														
IX-6-20201119	11/19/2020	1103	Water					X														
IX-7-20201119	11/19/2020	1106	Water					X														
IX-8-20201119	11/19/2020	1109	Water					X														
GAC-5-20201119	11/19/2020	1112	Water					X														
GAC-6-20201119	11/19/2020	1115	Water					X														
GAC-7-20201119	11/19/2020	1118	Water					X														
GAC-8-20201119	11/19/2020	1121	Water					X														
IX-5M-20201119	11/19/2020	1124	Water					X														
IX-6M-20201119	11/19/2020	1127	Water					X														
IX-7M-20201119	11/19/2020	1130	Water					X														
IX-8M-20201119	11/19/2020	1133	Water					X														
GAC-5M-20201119	11/19/2020	1136	Water					X														
GAC-6M-20201119	11/19/2020	1139	Water					X														
GAC-7M-20201119	11/19/2020	1142	Water					X														
GAC-8M-20201119	11/19/2020	1145	Water					X														
MB-INF-20201119	11/19/2020	1148	Water	14				X														
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature)		410		Received by: (Signature)															Date: 11/19/20	Time: 14H
Relinquished by: (Signature)		Received by: (Signature)				Received by: (Signature)															Date: 11/19/20	Time: 12:16
Relinquished by: (Signature)		Received by: (Signature)				Received by: (Signature)															Date: 11/19/20	Time: 12:16



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

904644

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 688A (Observation = 17.0 °C) (Corr. Factor = 2 °C) (Final = 15.0 °C) (Final ± 0.8 °C)

TYPE OF ICE: Real Synthetic No Ice Condition of Ice: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 - (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA and Radon Headspace: _____

No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 615-4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: [Signature] PRINT NAME: _____ DATE: 11/19/20 TIME: 14:16

SIGNATURE: _____ COMPANY/VITILE: Eurofins Eaton Analytical

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 904643
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Flags Legend:

MC - Matrix spike recovery was high; the associated blank spike recovery was acceptable. MS/MSD RPD met acceptance criteria.

REVISED REPORT. UPDATE SAMPLE ID TO MATCH COC. SFL 12/3/2020.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202011190350 <u>IX-1-20201119</u>						
11/23/2020 13:10	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
11/23/2020 13:10	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
202011190351 <u>IX-2-20201119</u>						
11/23/2020 13:20	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
202011190352 <u>IX-3-20201119</u>						
11/23/2020 13:29	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
11/23/2020 13:29	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
11/23/2020 13:29	Perfluorooctanoic acid (PFOA)		0.0020		ug/L	0.0020
202011190353 <u>IX-4-20201119</u>						
11/23/2020 13:39	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
202011190355 <u>GAC-1M-20201119</u>						
11/23/2020 13:58	Perfluorobutanesulfonic acid (PFBS)		0.0041		ug/L	0.0020
11/23/2020 13:58	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
11/23/2020 13:58	Perfluorooctanoic acid (PFOA)		0.0034		ug/L	0.0020
202011190356 <u>GAC-2M-20201119</u>						
11/23/2020 14:08	Perfluorobutanesulfonic acid (PFBS)		0.0068		ug/L	0.0020
11/23/2020 14:08	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
202011190357 <u>GAC-3M-20201119</u>						
11/23/2020 14:17	Perfluorobutanesulfonic acid (PFBS)		0.0063		ug/L	0.0020
11/23/2020 14:17	Perfluorohexanesulfonic acid (PFHxS)		0.0026		ug/L	0.0020
11/23/2020 14:17	Perfluorohexanoic acid (PFHxA)		0.0035		ug/L	0.0020
11/23/2020 14:17	Perfluorooctanesulfonic acid (PFOS)		0.0036		ug/L	0.0020
11/23/2020 14:17	Perfluorooctanoic acid (PFOA)		0.0055		ug/L	0.0020
202011190358 <u>GAC-4M-20201119</u>						
11/23/2020 14:27	Perfluorobutanesulfonic acid (PFBS)		0.0023		ug/L	0.0020
11/23/2020 14:27	Perfluorooctanesulfonic acid (PFOS)		0.0023		ug/L	0.0020
11/23/2020 14:27	Perfluorooctanoic acid (PFOA)		0.0022		ug/L	0.0020
202011190359 <u>IX-1M-20201119</u>						
11/23/2020 14:36	Perfluorobutanesulfonic acid (PFBS)		0.0020		ug/L	0.0020
11/23/2020 14:36	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
11/23/2020 14:36	Perfluorooctanesulfonic acid (PFOS)		0.0042		ug/L	0.0020
11/23/2020 14:36	Perfluorooctanoic acid (PFOA)		0.0075		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
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Samples Received on:
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202011190360 <u>IX-2M-20201119</u>						
11/23/2020 14:46	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
11/23/2020 14:46	Perfluorooctanoic acid (PFOA)		0.0087		ug/L	0.0020
202011190361 <u>IX-3M--20201119</u>						
11/23/2020 14:55	Perfluorobutanesulfonic acid (PFBS)		0.0035		ug/L	0.0020
11/23/2020 14:55	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
11/23/2020 14:55	Perfluorooctanoic acid (PFOA)		0.0088		ug/L	0.0020
202011190362 <u>IX-4M-20201119</u>						
11/23/2020 23:36	Perfluorobutanesulfonic acid (PFBS)		0.0050		ug/L	0.0020
11/23/2020 23:36	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
11/23/2020 23:36	Perfluorononanoic acid (PFNA)		0.0024		ug/L	0.0020
11/23/2020 23:36	Perfluorooctanesulfonic acid (PFOS)		0.0031		ug/L	0.0020
11/23/2020 23:36	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
202011190363 <u>LH-INF-20201119</u>						
11/23/2020 22:00	Perfluorobutanesulfonic acid (PFBS)		0.0071		ug/L	0.0020
11/23/2020 22:00	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
11/23/2020 22:00	Perfluorohexanoic acid (PFHxA)		0.0035		ug/L	0.0020
11/23/2020 22:00	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
11/23/2020 22:00	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
11/23/2020 22:00	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
202011190364 <u>IX-5-20201119</u>						
11/23/2020 23:45	Perfluorohexanoic acid (PFHxA)		0.0044		ug/L	0.0020
11/23/2020 23:45	Perfluorooctanoic acid (PFOA)		0.0023		ug/L	0.0020
202011190365 <u>IX-6-20201119</u>						
11/24/2020 00:06	Perfluoroheptanoic acid (PFHpA)		0.0023		ug/L	0.0020
11/24/2020 00:06	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
202011190366 <u>IX-7-20201119</u>						
11/24/2020 00:17	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
11/24/2020 00:17	Perfluorohexanoic acid (PFHxA)		0.0069		ug/L	0.0020
11/24/2020 00:17	Perfluorooctanoic acid (PFOA)		0.0037		ug/L	0.0020
202011190367 <u>IX-8-20201119</u>						
11/24/2020 00:26	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
11/24/2020 00:26	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
202011190368 <u>GAC-5--20201119</u>						

SUMMARY OF POSITIVE DATA ONLY

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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
11/24/2020 00:36	Perfluorobutanesulfonic acid (PFBS)		0.0098		ug/L	0.0020
11/24/2020 00:36	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
11/24/2020 00:36	Perfluorohexanoic acid (PFHxA)		0.0074		ug/L	0.0020
11/24/2020 00:36	Perfluorooctanesulfonic acid (PFOS)		0.0034		ug/L	0.0020
11/24/2020 00:36	Perfluorooctanoic acid (PFOA)		0.0073		ug/L	0.0020
		202011190369 <u>GAC-6--20201119</u>				
11/24/2020 00:45	Perfluorobutanesulfonic acid (PFBS)		0.018		ug/L	0.0020
11/24/2020 00:45	Perfluoroheptanoic acid (PFHpA)		0.0024		ug/L	0.0020
11/24/2020 00:45	Perfluorohexanoic acid (PFHxA)		0.011		ug/L	0.0020
		202011190370 <u>GAC-7-20201119</u>				
11/24/2020 00:55	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
11/24/2020 00:55	Perfluoroheptanoic acid (PFHpA)		0.0038		ug/L	0.0020
11/24/2020 00:55	Perfluorohexanesulfonic acid (PFHxS)		0.0021		ug/L	0.0020
11/24/2020 00:55	Perfluorohexanoic acid (PFHxA)		0.0082		ug/L	0.0020
11/24/2020 00:55	Perfluorooctanoic acid (PFOA)		0.0062		ug/L	0.0020
		202011190371 <u>GAC-8-20201119</u>				
11/24/2020 01:05	Perfluorobutanesulfonic acid (PFBS)		0.0055		ug/L	0.0020
11/24/2020 01:05	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
		202011190372 <u>IX-5M-20201119</u>				
11/24/2020 01:14	Perfluorobutanesulfonic acid (PFBS)		0.0028		ug/L	0.0020
11/24/2020 01:14	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
11/24/2020 01:14	Perfluorohexanoic acid (PFHxA)		0.0062		ug/L	0.0020
11/24/2020 01:14	Perfluorooctanesulfonic acid (PFOS)		0.0035		ug/L	0.0020
11/24/2020 01:14	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
		202011190373 <u>IX-6M-20201119</u>				
11/24/2020 01:24	Perfluorobutanesulfonic acid (PFBS)		0.0025		ug/L	0.0020
11/24/2020 01:24	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
11/24/2020 01:24	Perfluorohexanoic acid (PFHxA)		0.0054		ug/L	0.0020
11/24/2020 01:24	Perfluorooctanoic acid (PFOA)		0.0096		ug/L	0.0020
		202011190374 <u>IX-7M-20201119</u>				
11/24/2020 02:16	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
11/24/2020 02:16	Perfluoroheptanoic acid (PFHpA)		0.0046		ug/L	0.0020
11/24/2020 02:16	Perfluorohexanoic acid (PFHxA)		0.0074		ug/L	0.0020
11/24/2020 02:16	Perfluorononanoic acid (PFNA)		0.0024		ug/L	0.0020
11/24/2020 02:16	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202011190375 <u>IX-8M-20201119</u>						
11/24/2020 02:26	Perfluorobutanesulfonic acid (PFBS)		0.0040		ug/L	0.0020
11/24/2020 02:26	Perfluoroheptanoic acid (PFHpA)		0.0046		ug/L	0.0020
11/24/2020 02:26	Perfluorohexanoic acid (PFHxA)		0.0073		ug/L	0.0020
11/24/2020 02:26	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
202011190376 <u>GAC-5M-20201119</u>						
11/24/2020 01:57	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
11/24/2020 01:57	Perfluoroheptanoic acid (PFHpA)		0.0044		ug/L	0.0020
11/24/2020 01:57	Perfluorohexanesulfonic acid (PFHxS)		0.0043		ug/L	0.0020
11/24/2020 01:57	Perfluorohexanoic acid (PFHxA)		0.0079		ug/L	0.0020
11/24/2020 01:57	Perfluorononanoic acid (PFNA)		0.0021		ug/L	0.0020
11/24/2020 01:57	Perfluorooctanesulfonic acid (PFOS)		0.014		ug/L	0.0020
11/24/2020 01:57	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
202011190377 <u>GAC-6M-20201119</u>						
11/24/2020 02:35	Perfluorobutanesulfonic acid (PFBS)		0.013		ug/L	0.0020
11/24/2020 02:35	Perfluoroheptanoic acid (PFHpA)		0.0056		ug/L	0.0020
11/24/2020 02:35	Perfluorohexanesulfonic acid (PFHxS)		0.0058		ug/L	0.0020
11/24/2020 02:35	Perfluorohexanoic acid (PFHxA)		0.0085		ug/L	0.0020
11/24/2020 02:35	Perfluorooctanesulfonic acid (PFOS)		0.0061		ug/L	0.0020
11/24/2020 02:35	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
202011190378 <u>GAC-7M-20201119</u>						
11/24/2020 02:45	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
11/24/2020 02:45	Perfluoroheptanoic acid (PFHpA)		0.0048		ug/L	0.0020
11/24/2020 02:45	Perfluorohexanesulfonic acid (PFHxS)		0.0058		ug/L	0.0020
11/24/2020 02:45	Perfluorohexanoic acid (PFHxA)		0.0084		ug/L	0.0020
11/24/2020 02:45	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
11/24/2020 02:45	Perfluorooctanesulfonic acid (PFOS)		0.017		ug/L	0.0020
11/24/2020 02:45	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
202011190379 <u>GAC-8M-20201119</u>						
11/24/2020 02:54	Perfluorobutanesulfonic acid (PFBS)		0.0094		ug/L	0.0020
11/24/2020 02:54	Perfluoroheptanoic acid (PFHpA)		0.0037		ug/L	0.0020
11/24/2020 02:54	Perfluorohexanesulfonic acid (PFHxS)		0.0036		ug/L	0.0020
11/24/2020 02:54	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
11/24/2020 02:54	Perfluorooctanesulfonic acid (PFOS)		0.013		ug/L	0.0020
11/24/2020 02:54	Perfluorooctanoic acid (PFOA)		0.0098		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202011190380	<u>MB-INF-20201119</u>				
11/24/2020 03:04	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
11/24/2020 03:04	Perfluoroheptanoic acid (PFHpA)		0.0047		ug/L	0.0020
11/24/2020 03:04	Perfluorohexanesulfonic acid (PFHxS)		0.0067		ug/L	0.0020
11/24/2020 03:04	Perfluorohexanoic acid (PFHxA)		0.0070		ug/L	0.0020
11/24/2020 03:04	Perfluorononanoic acid (PFNA)		0.0040		ug/L	0.0020
11/24/2020 03:04	Perfluorooctanesulfonic acid (PFOS)		0.043		ug/L	0.0020
11/24/2020 03:04	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020

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Report: 904643
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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20201119 (202011190346)					Sampled on 11/19/2020 0830				
EPA 537.1 - EPA Method 537.1									
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	13C2-PFDA	110	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	13C2-PFHxA	114	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	107	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/20/20	11/23/20 12:32	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	106	%		1

GAC-2-20201119 (202011190347)					Sampled on 11/19/2020 0833				
EPA 537.1 - EPA Method 537.1									
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	13C2-PFDA	109	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	13C2-PFHxA	115	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	107	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	94	%		1
11/20/20	11/23/20 12:41	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	109	%		1

GAC-3-20201119 (202011190348)

Sampled on 11/19/2020 0836

EPA 537.1 - EPA Method 537.1

11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	13C2-PFDA	106	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	13C2-PFHxA	120	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	103	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	97	%		1
11/20/20	11/23/20 12:51	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	106	%		1

GAC-4-20201119 (202011190349)

Sampled on 11/19/2020 0839

EPA 537.1 - EPA Method 537.1

11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	13C2-PFDA	106	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	13C2-PFHxA	111	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	101	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/20/20	11/23/20 13:01	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	103	%		1

IX-1-20201119 (202011190350)

Sampled on 11/19/2020 0842

EPA 537.1 - EPA Method 537.1

11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	13C2-PFDA	109	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	13C2-PFHxA	113	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	109	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	95	%		1
11/20/20	11/23/20 13:10	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-2-20201119 (202011190351)

Sampled on 11/19/2020 0845

EPA 537.1 - EPA Method 537.1

11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	13C2-PFDA	105	%		1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	13C2-PFHxA	110	%		1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	104	%		1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	94	%		1

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Tel: (626) 386-1100
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 13:20	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	103	%		1
IX-3-20201119 (202011190352)					Sampled on 11/19/2020 0848				
EPA 537.1 - EPA Method 537.1									
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0020	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	13C2-PFDA	113	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	13C2-PFHxA	113	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	110	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	92	%		1
11/20/20	11/23/20 13:29	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	107	%		1

IX-4-20201119 (202011190353)

Sampled on 11/19/2020 0851

EPA 537.1 - EPA Method 537.1

11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	13C2-PFDA	108	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	13C2-PFHxA	112	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	106	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	92	%		1
11/20/20	11/23/20 13:39	1289712	1290300	(EPA 537.1)	d5-NETFOSAA	106	%		1

GAC-1M-20201119 (202011190355)

Sampled on 11/19/2020 0854

EPA 537.1 - EPA Method 537.1

11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0041	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0034	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	13C2-PFDA	107	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	13C2-PFHxA	115	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	106	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	91	%		1
11/20/20	11/23/20 13:58	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	105	%		1

GAC-2M-20201119 (202011190356)

Sampled on 11/19/2020 0857

EPA 537.1 - EPA Method 537.1

11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0068	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	13C2-PFDA	110	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	13C2-PFHxA	116	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	107	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	90	%		1
11/20/20	11/23/20 14:08	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	109	%		1

GAC-3M-20201119 (202011190357)

Sampled on 11/19/2020 0900

EPA 537.1 - EPA Method 537.1

11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0063	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0026	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0036	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0055	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	13C2-PFDA	109	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	13C2-PFHxA	118	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	112	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	91	%		1
11/20/20	11/23/20 14:17	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	107	%		1

GAC-4M-20201119 (202011190358)

Sampled on 11/19/2020 0903

EPA 537.1 - EPA Method 537.1

11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0023	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0023	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0022	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	13C2-PFDA	107	%		1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	13C2-PFHxA	114	%		1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	103	%		1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	92	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 14:27	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	101	%		1
IX-1M-20201119 (202011190359)					Sampled on 11/19/2020 0906				
EPA 537.1 - EPA Method 537.1									
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0020	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0042	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0075	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	13C2-PFDA	111	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	13C2-PFHxA	112	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	108	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	93	%		1
11/20/20	11/23/20 14:36	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-2M-20201119 (202011190360)

Sampled on 11/19/2020 0909

EPA 537.1 - EPA Method 537.1

11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0087	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	13C2-PFDA	112	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	13C2-PFHxA	114	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	107	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	89	%		1
11/20/20	11/23/20 14:46	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	110	%		1

IX-3M--20201119 (202011190361)

Sampled on 11/19/2020 0912

EPA 537.1 - EPA Method 537.1

11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0035	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0088	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	13C2-PFDA	111	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	13C2-PFHxA	119	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	13C3-HFPO-DA	110	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	d3-NMeFOSAA	93	%		1
11/20/20	11/23/20 14:55	1289712	1290300	(EPA 537.1)	d5-NEtFOSAA	106	%		1

IX-4M-20201119 (202011190362)

Sampled on 11/19/2020 0915

EPA 537.1 - EPA Method 537.1

11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0050	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1

Rounding on totals after summation.
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 Fax: (866) 988-3757
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0024	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0031	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	13C2-PFDA	101	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	13C2-PFHxA	98	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	96	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/21/20	11/23/20 23:36	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	97	%		1

LH-INF-20201119 (202011190363)

Sampled on 11/19/2020 0918

EPA 537.1 - EPA Method 537.1

11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0071	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0035	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012 (MC)	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	13C2-PFDA	102	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	13C2-PFHxA	99	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	95	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/21/20	11/23/20 22:00	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	97	%		1

IX-5-20201119 (202011190364)

Sampled on 11/19/2020 1100

EPA 537.1 - EPA Method 537.1

11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0044	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0023	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	13C2-PFDA	103	%		1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	13C2-PFHxA	97	%		1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	94	%		1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/23/20 23:45	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	98	%		1
IX-6-20201119 (202011190365)					Sampled on 11/19/2020 1103				
EPA 537.1 - EPA Method 537.1									
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	13C2-PFDA	102	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	13C2-PFHxA	99	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	97	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	97	%		1
11/21/20	11/24/20 00:06	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	99	%		1

IX-7-20201119 (202011190366)

Sampled on 11/19/2020 1106

EPA 537.1 - EPA Method 537.1

11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0069	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0037	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	13C2-PFDA	106	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	13C2-PFHxA	100	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	101	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	97	%		1
11/21/20	11/24/20 00:17	1289861	1290329	(EPA 537.1)	d5-NETFOSAA	101	%		1

IX-8-20201119 (202011190367)

Sampled on 11/19/2020 1109

EPA 537.1 - EPA Method 537.1

11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	13C2-PFDA	103	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	13C2-PFHxA	101	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	100	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/21/20	11/24/20 00:26	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	99	%		1

GAC-5--20201119 (202011190368)

Sampled on 11/19/2020 1112

EPA 537.1 - EPA Method 537.1

11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0098	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0074	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0034	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0073	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	13C2-PFDA	102	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	13C2-PFHxA	101	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	97	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/21/20	11/24/20 00:36	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-6--20201119 (202011190369)

Sampled on 11/19/2020 1115

EPA 537.1 - EPA Method 537.1

11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.018	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0024	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.011	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	13C2-PFDA	101	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	13C2-PFHxA	104	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	98	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/21/20	11/24/20 00:45	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	97	%		1

GAC-7-20201119 (202011190370)

Sampled on 11/19/2020 1118

EPA 537.1 - EPA Method 537.1

11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0021	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0082	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0062	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	13C2-PFDA	107	%		1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	13C2-PFHxA	105	%		1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	102	%		1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	98	%		1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 00:55	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	105	%		1
GAC-8-20201119 (202011190371)					Sampled on 11/19/2020 1121				
EPA 537.1 - EPA Method 537.1									
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0055	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	13C2-PFDA	104	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	13C2-PFHxA	105	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	100	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/21/20	11/24/20 01:05	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	98	%		1

IX-5M-20201119 (202011190372)

Sampled on 11/19/2020 1124

EPA 537.1 - EPA Method 537.1

11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0028	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0062	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0035	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	13C2-PFDA	106	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	13C2-PFHxA	100	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	97	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/21/20	11/24/20 01:14	1289861	1290329	(EPA 537.1)	d5-NETFOSAA	105	%		1

IX-6M-20201119 (202011190373)

Sampled on 11/19/2020 1127

EPA 537.1 - EPA Method 537.1

11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0025	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0054	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0096	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	13C2-PFDA	107	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	13C2-PFHxA	102	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	13C3-HFPO-DA	99	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/21/20	11/24/20 01:24	1289861	1290329	(EPA 537.1)	d5-NEtFOSAA	101	%		1

IX-7M-20201119 (202011190374)

Sampled on 11/19/2020 1130

EPA 537.1 - EPA Method 537.1

11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0046	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0074	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0024	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	13C2-PFDA	110	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	13C2-PFHxA	108	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	102	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/22/20	11/24/20 02:16	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	99	%		1

IX-8M-20201119 (202011190375)

Sampled on 11/19/2020 1133

EPA 537.1 - EPA Method 537.1

11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0040	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0046	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0073	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	13C2-PFDA	110	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	13C2-PFHxA	110	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	104	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/22/20	11/24/20 02:26	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-5M-20201119 (202011190376)

Sampled on 11/19/2020 1136

EPA 537.1 - EPA Method 537.1

11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0044	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0043	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0079	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0021	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.014	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	13C2-PFDA	109	%		1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	13C2-PFHxA	112	%		1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	101	%		1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	99	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 01:57	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	100	%		1
GAC-6M-20201119 (202011190377)					Sampled on 11/19/2020 1139				
EPA 537.1 - EPA Method 537.1									
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.013	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0056	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0058	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0085	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0061	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	13C2-PFDA	107	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	13C2-PFHxA	113	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	103	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	100	%		1
11/22/20	11/24/20 02:35	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-7M-20201119 (202011190378)

Sampled on 11/19/2020 1142

EPA 537.1 - EPA Method 537.1

11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0048	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0058	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0084	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.017	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	13C2-PFDA	105	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	13C2-PFHxA	111	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	102	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	96	%		1
11/22/20	11/24/20 02:45	1289956	1290319	(EPA 537.1)	d5-NETFOSAA	103	%		1

GAC-8M-20201119 (202011190379)

Sampled on 11/19/2020 1145

EPA 537.1 - EPA Method 537.1

11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0094	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0037	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0036	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.013	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0098	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	13C2-PFDA	111	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	13C2-PFHxA	115	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	105	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	98	%		1
11/22/20	11/24/20 02:54	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	101	%		1

MB-INF-20201119 (202011190380)

Sampled on 11/19/2020 1148

EPA 537.1 - EPA Method 537.1

11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0047	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0067	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0070	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 904643
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0040	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.043	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	13C2-PFDA	108	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	13C2-PFHxA	106	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	13C3-HFPO-DA	98	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	d3-NMeFOSAA	99	%		1
11/22/20	11/24/20 03:04	1289956	1290319	(EPA 537.1)	d5-NEtFOSAA	99	%		1

Rounding on totals after summation.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

EPA Method 537.1

Prep Batch: 1289712 Analytical Batch: 1290300

Analysis Date: 11/23/2020

202011190346	GAC-1-20201119
202011190347	GAC-2-20201119
202011190348	GAC-3-20201119
202011190349	GAC-4-20201119
202011190350	IX-1-20201119
202011190351	IX-2-20201119
202011190352	IX-3-20201119
202011190353	IX-4-20201119
202011190355	GAC-1M-20201119
202011190356	GAC-2M-20201119
202011190357	GAC-3M-20201119
202011190358	GAC-4M-20201119
202011190359	IX-1M-20201119
202011190360	IX-2M-20201119
202011190361	IX-3M--20201119

Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
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 Analyzed by: SZZ
 Analyzed by: SZZ

EPA Method 537.1

Prep Batch: 1289956 Analytical Batch: 1290319

Analysis Date: 11/24/2020

202011190374	IX-7M-20201119
202011190375	IX-8M-20201119
202011190376	GAC-5M-20201119
202011190377	GAC-6M-20201119
202011190378	GAC-7M-20201119
202011190379	GAC-8M-20201119
202011190380	MB-INF-20201119

Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ

EPA Method 537.1

Prep Batch: 1289861 Analytical Batch: 1290329

Analysis Date: 11/23/2020

202011190362	IX-4M-20201119
202011190363	LH-INF-20201119
202011190364	IX-5-20201119
202011190365	IX-6-20201119
202011190366	IX-7-20201119
202011190367	IX-8-20201119
202011190368	GAC-5--20201119
202011190369	GAC-6--20201119
202011190370	GAC-7-20201119
202011190371	GAC-8-20201119
202011190372	IX-5M-20201119
202011190373	IX-6M-20201119

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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Analytical Batch: 1290300					Analysis Date: 11/23/2020				
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0474	ug/L	101	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0499	ug/L	106	(70-130)	30	4.9
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS_202011240093	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00167	ug/L	89	(50-150)		
MSD_202011240093	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00180	ug/L	95	(50-150)	50	7.7
LCS3	13C2-PFDA (S)		100	107	%	107	(70-130)		
LCS4	13C2-PFDA (S)		100	112	%	112	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	111	%	111	(70-130)		
MS_202011240093	13C2-PFDA (S)		100	94.2	%	94	(70-130)		
MSD_202011240093	13C2-PFDA (S)		100	93.3	%	93	(70-130)		
LCS3	13C2-PFHxA (S)		100	112	%	112	(70-130)		
LCS4	13C2-PFHxA (S)		100	116	%	116	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	116	%	117	(70-130)		
MS_202011240093	13C2-PFHxA (S)		100	113	%	113	(70-130)		
MSD_202011240093	13C2-PFHxA (S)		100	111	%	111	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	97.9	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	96.9	%	97	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			102	%	102	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	98.6	%	99	(50-150)		
MS_202011240093	13C2-PFOA- IS#1 (I)		100	96.6	%	97	(50-150)		
MSD_202011240093	13C2-PFOA- IS#1 (I)		100	97.0	%	97	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
MBLK	13C3-HFPO-DA (S)			107	%	107	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
MS_202011240093	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
MSD_202011240093	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	96.2	%	96	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	97.1	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			98.8	%	99	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.9	%	98	(50-150)		
MS_202011240093	13C4-PFOS- IS#2 (I)		100	94.9	%	95	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202011240093	13C4-PFOS- IS#2 (I)		100	94.2	%	94	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0501	ug/L	103	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0516	ug/L	106	(70-130)	30	3.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00212	ug/L	112	(50-150)		
MS_202011240093	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00209	ug/L	109	(50-150)		
MSD_202011240093	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00214	ug/L	111	(50-150)	50	2.5
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0480	ug/L	103	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0501	ug/L	108	(70-130)	30	4.3
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00201	ug/L	108	(50-150)		
MS_202011240093	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00179	ug/L	96	(50-150)		
MSD_202011240093	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00183	ug/L	98	(50-150)	50	2.4
LCS3	d3-NMeFOSAA (I)		100	96.4	%	96	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	97.4	%	97	(50-150)		
MBLK	d3-NMeFOSAA (I)			98.9	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	98.4	%	98	(50-150)		
MS_202011240093	d3-NMeFOSAA (I)		100	95.0	%	95	(50-150)		
MSD_202011240093	d3-NMeFOSAA (I)		100	94.1	%	94	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MBLK	d5-NEtFOSAA (S)			107	%	107	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
MS_202011240093	d5-NEtFOSAA (S)		100	77.4	%	77	(70-130)		
MSD_202011240093	d5-NEtFOSAA (S)		100	79.9	%	80	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0516	ug/L	103	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0546	ug/L	109	(70-130)	30	5.7
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00209	ug/L	105	(50-150)		
MS_202011240093	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00212	ug/L	106	(50-150)		
MSD_202011240093	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00220	ug/L	110	(50-150)	50	3.8
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0496	ug/L	99	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0513	ug/L	103	(70-130)	30	3.4
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00210	ug/L	105	(50-150)		
MS_202011240093	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00175	ug/L	88	(50-150)		
MSD_202011240093	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00176	ug/L	88	(50-150)	50	0.46
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0507	ug/L	101	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0524	ug/L	105	(70-130)	30	3.3
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00207	ug/L	103	(50-150)		
MS_202011240093	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00172	ug/L	85	(50-150)		
MSD_202011240093	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00168	ug/L	82	(50-150)	50	2.4
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0493	ug/L	111	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0504	ug/L	114	(70-130)	30	2.2
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00208	ug/L	117	(50-150)		
MS_202011240093	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00207	ug/L	116	(50-150)		
MSD_202011240093	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00207	ug/L	117	(50-150)	50	0.15
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0527	ug/L	105	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0555	ug/L	111	(70-130)	30	5.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202011240093	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00202	ug/L	101	(50-150)		
MSD_202011240093	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00195	ug/L	97	(50-150)	50	3.6
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0561	ug/L	112	(70-130)	30	5.3
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202011240093	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00203	ug/L	102	(50-150)		
MSD_202011240093	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00204	ug/L	102	(50-150)	50	0.38
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0545	ug/L	109	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0561	ug/L	112	(70-130)	30	2.9
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00238	ug/L	119	(50-150)		
MS_202011240093	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00244	ug/L	119	(50-150)		
MSD_202011240093	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00235	ug/L	115	(50-150)	50	4.0
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0498	ug/L	109	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0500	ug/L	110	(70-130)	30	0.40
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00209	ug/L	115	(50-150)		
MS_202011240093	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00213	ug/L	116	(50-150)		
MSD_202011240093	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00215	ug/L	118	(50-150)	50	0.91
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0544	ug/L	109	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0576	ug/L	115	(70-130)	30	5.7
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 904643
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00234	ug/L	117	(50-150)		
MS_202011240093	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00239	ug/L	116	(50-150)		
MSD_202011240093	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00232	ug/L	113	(50-150)	50	2.8
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0564	ug/L	113	(70-130)	30	7.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00238	ug/L	119	(50-150)		
MS_202011240093	Perfluorononanoic acid (PFNA)	ND	0.002	0.00221	ug/L	108	(50-150)		
MSD_202011240093	Perfluorononanoic acid (PFNA)	ND	0.002	0.00217	ug/L	107	(50-150)	50	1.7
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0523	ug/L	113	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0531	ug/L	115	(70-130)	30	1.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00225	ug/L	121	(50-150)		
MS_202011240093	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00205	ug/L	107	(50-150)		
MSD_202011240093	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00207	ug/L	108	(50-150)	50	0.79
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0556	ug/L	111	(70-130)	30	4.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202011240093	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00229	ug/L	114	(50-150)		
MSD_202011240093	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00228	ug/L	114	(50-150)	50	0.27
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0518	ug/L	104	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0553	ug/L	111	(70-130)	30	6.5
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00225	ug/L	112	(50-150)		
MS_202011240093	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00210	ug/L	96	(50-150)		
MSD_202011240093	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00217	ug/L	100	(50-150)	50	3.1
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0511	ug/L	102	(70-130)	30	3.8
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00200	ug/L	100	(50-150)		
MS_202011240093	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00181	ug/L	90	(50-150)		
MSD_202011240093	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00189	ug/L	94	(50-150)	50	4.4
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0503	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0535	ug/L	107	(70-130)	30	6.2
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202011240093	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00192	ug/L	96	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202011240093	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00189	ug/L	95	(50-150)	50	1.4

EPA Method 537.1 by EPA 537.1

Prep Batch: 1289956 Analytical Batch: 1290319

Analysis Date: 11/24/2020

DUP_202011190376	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0240	ug/L	102	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0243	ug/L	103	(70-130)	30	1.2
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00181	ug/L	96	(50-150)		
MS2_202011170274	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0475	ug/L	101	(70-130)		
DUP_202011190376	13C2-PFDA (S)			108	%	108	(70-130)		
LCS1	13C2-PFDA (S)		100	105	%	105	(70-130)		
LCS2	13C2-PFDA (S)		100	110	%	110	(70-130)		
MBLK	13C2-PFDA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	110	%	110	(70-130)		
MS2_202011170274	13C2-PFDA (S)		100	110	%	111	(70-130)		
DUP_202011190376	13C2-PFHxA (S)			113	%	113	(70-130)		
LCS1	13C2-PFHxA (S)		100	113	%	113	(70-130)		
LCS2	13C2-PFHxA (S)		100	110	%	110	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	111	%	111	(70-130)		
MS2_202011170274	13C2-PFHxA (S)		100	111	%	111	(70-130)		
DUP_202011190376	13C2-PFOA- IS#1 (I)			98.5	%	98	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	98.3	%	98	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.0	%	98	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MS2_202011170274	13C2-PFOA- IS#1 (I)		100	96.9	%	97	(50-150)		
DUP_202011190376	13C3-HFPO-DA (S)			105	%	105	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
MBLK	13C3-HFPO-DA (S)			101	%	101	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MS2_202011170274	13C3-HFPO-DA (S)		100	108	%	109	(70-130)		
DUP_202011190376	13C4-PFOS- IS#2 (I)			94.0	%	94	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	94.5	%	94	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	95.5	%	96	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			94.1	%	94	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS2_202011170274	13C4-PFOS- IS#2 (I)		100	93.8	%	94	(50-150)		
DUP_202011190376	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0257	ug/L	109	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0263	ug/L	111	(70-130)	30	2.3
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00205	ug/L	108	(50-150)		
MS2_202011170274	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0510	ug/L	105	(70-130)		
DUP_202011190376	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0252	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0255	ug/L	110	(70-130)	30	1.2
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00188	ug/L	101	(50-150)		
MS2_202011170274	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0489	ug/L	105	(70-130)		
DUP_202011190376	d3-NMeFOSAA (I)			97.9	%	98	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	98.0	%	98	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	96.0	%	96	(50-150)		
MBLK	d3-NMeFOSAA (I)			94.2	%	94	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
MS2_202011170274	d3-NMeFOSAA (I)		100	98.2	%	98	(50-150)		
DUP_202011190376	d5-NEtFOSAA (S)			98.8	%	99	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	98.9	%	99	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	99.2	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			103	%	103	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	104	%	105	(70-130)		
MS2_202011170274	d5-NEtFOSAA (S)		100	95.1	%	95	(70-130)		
DUP_202011190376	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0258	ug/L	103	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0255	ug/L	102	(70-130)	30	1.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00193	ug/L	97	(50-150)		
MS2_202011170274	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0523	ug/L	105	(70-130)		
DUP_202011190376	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0244	ug/L	98	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0252	ug/L	101	(70-130)	30	2.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	105	(50-150)		
MS2_202011170274	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0484	ug/L	97	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202011190376	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0250	ug/L	100	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0251	ug/L	101	(70-130)	30	0.40
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00205	ug/L	103	(50-150)		
MS2_202011170274	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0474	ug/L	95	(70-130)		
DUP_202011190376	Perfluorobutanesulfonic acid (PFBS)	0.011		0.0112	ug/L		(0-30)	30	0.90
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0260	ug/L	117	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0246	ug/L	111	(70-130)	30	5.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00182	ug/L	103	(50-150)		
MS2_202011170274	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0540	ug/L	122	(70-130)		
DUP_202011190376	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0266	ug/L	107	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0269	ug/L	108	(70-130)	30	0.75
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202011170274	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0558	ug/L	112	(70-130)		
DUP_202011190376	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0256	ug/L	103	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0269	ug/L	108	(70-130)	30	5.0
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00208	ug/L	104	(50-150)		
MS2_202011170274	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0536	ug/L	107	(70-130)		
DUP_202011190376	Perfluoroheptanoic acid (PFHpA)	0.0044		0.00452	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0281	ug/L	113	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0291	ug/L	116	(70-130)	30	3.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00228	ug/L	114	(50-150)		
MS2_202011170274	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0601	ug/L	120	(70-130)		
DUP_202011190376	Perfluorohexanesulfonic acid (PFHxS)	0.0043		0.00452	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0259	ug/L	114	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0251	ug/L	110	(70-130)	30	3.1
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS2_202011170274	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0551	ug/L	121	(70-130)		
DUP_202011190376	Perfluorohexanoic acid (PFHxA)	0.0079		0.00785	ug/L		(0-30)	30	1
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0285	ug/L	114	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0282	ug/L	113	(70-130)	30	1.1
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202011170274	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0628	ug/L	126	(70-130)		
DUP_202011190376	Perfluorononanoic acid (PFNA)	0.0021		0.00222	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0283	ug/L	113	(70-130)	30	1.8
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00218	ug/L	109	(50-150)		
MS2_202011170274	Perfluorononanoic acid (PFNA)	ND	0.05	0.0571	ug/L	114	(70-130)		
DUP_202011190376	Perfluorooctanesulfonic acid (PFOS)	0.014		0.0157	ug/L		(0-30)	30	9.5
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0247	ug/L	107	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0252	ug/L	109	(70-130)	30	2.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00210	ug/L	114	(50-150)		
MS2_202011170274	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0891	ug/L	192	(70-130)		
DUP_202011190376	Perfluorooctanoic acid (PFOA)	0.012		0.0134	ug/L		(0-30)	30	6.7
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0280	ug/L	112	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0283	ug/L	113	(70-130)	30	1.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00221	ug/L	111	(50-150)		
MS2_202011170274	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0682	ug/L	136	(70-130)		
DUP_202011190376	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0302	ug/L	121	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0315	ug/L	126	(70-130)	30	4.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00253	ug/L	126	(50-150)		
MS2_202011170274	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0638	ug/L	127	(70-130)		
DUP_202011190376	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0233	ug/L	93	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0240	ug/L	96	(70-130)	30	3.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00195	ug/L	98	(50-150)		
MS2_202011170274	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0485	ug/L	97	(70-130)		
DUP_202011190376	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0263	ug/L	105	(70-130)	30	2.3
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00206	ug/L	103	(50-150)		
MS2_202011170274	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0509	ug/L	102	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1289861 Analytical Batch: 1290329

Analysis Date: 11/23/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0510	ug/L	108	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0505	ug/L	107	(70-130)	30	0.99
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00198	ug/L	105	(50-150)		
MS_202011190363	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00195	ug/L	101	(50-150)		
MSD_202011190363	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00196	ug/L	102	(50-150)	50	0.45
LCS3	13C2-PFDA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			99.9	%	100	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	102	%	102	(70-130)		
MS_202011190363	13C2-PFDA (S)		100	102	%	102	(70-130)		
MSD_202011190363	13C2-PFDA (S)		100	101	%	101	(70-130)		
LCS3	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFHxA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	100	%	100	(70-130)		
MS_202011190363	13C2-PFHxA (S)		100	98.2	%	98	(70-130)		
MSD_202011190363	13C2-PFHxA (S)		100	97.6	%	98	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	102	%	103	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	97.5	%	97	(50-150)		
MS_202011190363	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MSD_202011190363	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	97.5	%	98	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	96.4	%	96	(70-130)		
MBLK	13C3-HFPO-DA (S)			93.8	%	94	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	96.4	%	96	(70-130)		
MS_202011190363	13C3-HFPO-DA (S)		100	96.7	%	97	(70-130)		
MSD_202011190363	13C3-HFPO-DA (S)		100	95.2	%	95	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	99.6	%	100	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.0	%	98	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			99.5	%	99	(50-150)		

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 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.4	%	98	(50-150)		
MS_202011190363	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MSD_202011190363	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0504	ug/L	104	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0501	ug/L	103	(70-130)	30	0.60
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00208	ug/L	110	(50-150)		
MS_202011190363	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00206	ug/L	107	(50-150)		
MSD_202011190363	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00206	ug/L	107	(50-150)	50	0.19
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0515	ug/L	110	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0514	ug/L	110	(70-130)	30	0.19
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00207	ug/L	111	(50-150)		
MS_202011190363	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00196	ug/L	102	(50-150)		
MSD_202011190363	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00198	ug/L	104	(50-150)	50	1.1
LCS3	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	98.3	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.3	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	97.9	%	98	(50-150)		
MS_202011190363	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MSD_202011190363	d3-NMeFOSAA (I)		100	99.8	%	100	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	98.8	%	99	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	100	%	100	(70-130)		
MBLK	d5-NEtFOSAA (S)			95.0	%	95	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	96.3	%	96	(70-130)		
MS_202011190363	d5-NEtFOSAA (S)		100	97.0	%	97	(70-130)		
MSD_202011190363	d5-NEtFOSAA (S)		100	96.3	%	96	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0521	ug/L	104	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0514	ug/L	103	(70-130)	30	1.4
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202011190363	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00210	ug/L	105	(50-150)		
MSD_202011190363	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00206	ug/L	103	(50-150)	50	1.4
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0529	ug/L	106	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0534	ug/L	107	(70-130)	30	0.94
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00200	ug/L	100	(50-150)		
MS_202011190363	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00238	ug/L	119	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202011190363	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00198	ug/L	99	(50-150)	50	18
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0532	ug/L	106	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0532	ug/L	106	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00215	ug/L	108	(50-150)		
MS_202011190363	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00207	ug/L	104	(50-150)		
MSD_202011190363	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00211	ug/L	105	(50-150)	50	1.8
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0490	ug/L	111	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0477	ug/L	108	(70-130)	30	2.7
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00195	ug/L	110	(50-150)		
MS_202011190363	Perfluorobutanesulfonic acid (PFBS)	0.0071	0.0018	0.00863	ug/L	84	(50-150)		
MSD_202011190363	Perfluorobutanesulfonic acid (PFBS)	0.0071	0.0018	0.00919	ug/L	115	(50-150)	50	6.3
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0555	ug/L	111	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0542	ug/L	108	(70-130)	30	2.4
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00231	ug/L	115	(50-150)		
MS_202011190363	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00328	ug/L	104	(50-150)		
MSD_202011190363	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00332	ug/L	106	(50-150)	50	1.3
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0522	ug/L	105	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0514	ug/L	103	(70-130)	30	1.7
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00217	ug/L	109	(50-150)		
MS_202011190363	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00216	ug/L	108	(50-150)		
MSD_202011190363	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00200	ug/L	100	(50-150)	50	8.0
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0557	ug/L	111	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0538	ug/L	108	(70-130)	30	3.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00221	ug/L	110	(50-150)		
MS_202011190363	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00393	ug/L	105	(50-150)		
MSD_202011190363	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00378	ug/L	97	(50-150)	50	3.9
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0496	ug/L	109	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0502	ug/L	110	(70-130)	30	1.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00210	ug/L	115	(50-150)		
MS_202011190363	Perfluorohexanesulfonic acid (PFHxS)	0.0060	0.0018	0.00775	ug/L	95	(50-150)		
MSD_202011190363	Perfluorohexanesulfonic acid (PFHxS)	0.0060	0.0018	0.00830	ug/L	125	(50-150)	50	6.9
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0532	ug/L	106	(70-130)		

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0522	ug/L	104	(70-130)	30	1.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00229	ug/L	115	(50-150)		
MS_202011190363	Perfluorohexanoic acid (PFHxA)	0.0035	0.002	0.00549	ug/L	98	(50-150)		
MSD_202011190363	Perfluorohexanoic acid (PFHxA)	0.0035	0.002	0.00547	ug/L	97	(50-150)	50	0.33
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0544	ug/L	109	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0540	ug/L	108	(70-130)	30	0.74
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00235	ug/L	117	(50-150)		
MS_202011190363	Perfluorononanoic acid (PFNA)	0.0029	0.002	0.00524	ug/L	115	(50-150)		
MSD_202011190363	Perfluorononanoic acid (PFNA)	0.0029	0.002	0.00519	ug/L	112	(50-150)	50	0.89
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0530	ug/L	114	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0518	ug/L	112	(70-130)	30	2.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00211	ug/L	114	(50-150)		
MS_202011190363	Perfluorooctanesulfonic acid (PFOS)	0.032	0.0019	0.0331	ug/L	72	(50-150)		
MSD_202011190363	Perfluorooctanesulfonic acid (PFOS)	0.032	0.0019	0.0343	ug/L	140	(50-150)	50	3.6
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0551	ug/L	110	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0551	ug/L	110	(70-130)	30	0.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00274	ug/L	137	(50-150)		
MS_202011190363	Perfluorooctanoic acid (PFOA)	0.012	0.002	0.0143	ug/L	86	(50-150)		
MSD_202011190363	Perfluorooctanoic acid (PFOA)	0.012	0.002	0.0157	ug/L	158	(50-150)	50	9.4
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0615	ug/L	123	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0605	ug/L	121	(70-130)	30	1.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00273	ug/L	137	(50-150)		
MS_202011190363	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00303	ug/L	132	(50-150)		
MSD_202011190363	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00282	ug/L	122	(50-150)	50	7.1
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0528	ug/L	106	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0524	ug/L	105	(70-130)	30	0.76
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00218	ug/L	109	(50-150)		
MS_202011190363	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00218	ug/L	109	(50-150)		
MSD_202011190363	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00213	ug/L	107	(50-150)	50	2.4
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0541	ug/L	108	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0533	ug/L	107	(70-130)	30	1.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 904643
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202011190363	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00215	ug/L	100	(50-150)		
MSD_202011190363	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00226	ug/L	105	(50-150)	50	5.1

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 12/03/2020

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 12/03/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 12/03/2020

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**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____

Project: _____
 Phone #: _____
 Date Received: _____
 Sampled By: _____
 Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
 P = Presence; A = Absence

Notification Required _____

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Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

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Date of Issue: 12/03/2020

Quant Report - Page 1 of 1

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Monrovia, California 91016-3629
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1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles

REPORT REVISED,
replaces the original report.



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 904644
Project: 0250000
Group: WRD Pilot [Set #1]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 904644
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **November 19, 2020 at 1416**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date																					
202011190339	LH-INF-20201119	11/19/2020 0918																					
	<table border="1"> <tr> <td>@ANIONS48</td> <td>@VOASDWA</td> <td>Alkalinity in CaCO3 units</td> </tr> <tr> <td>Arsenic Total ICAP/MS</td> <td>Calcium Total ICAP</td> <td>Chloride</td> </tr> <tr> <td>Hexavalent chromium(Dissolved)</td> <td>Iron Total ICAP</td> <td>Magnesium Total ICAP</td> </tr> <tr> <td>Manganese Total ICAP/MS</td> <td>Oil and Grease by 1664(subbed)</td> <td>Perchlorate</td> </tr> <tr> <td>Potassium Total ICAP</td> <td>Sodium Total ICAP</td> <td>Sulfate</td> </tr> <tr> <td>Total Dissolved Solid (TDS)</td> <td>Total Hardness as CaCO3 by ICP</td> <td>Total Organic Carbon</td> </tr> <tr> <td>Total Suspended Solids (TSS)</td> <td>Uranium by ICPMS as pCi/L</td> <td>Uranium ICAP/MS</td> </tr> </table>	@ANIONS48	@VOASDWA	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Calcium Total ICAP	Chloride	Hexavalent chromium(Dissolved)	Iron Total ICAP	Magnesium Total ICAP	Manganese Total ICAP/MS	Oil and Grease by 1664(subbed)	Perchlorate	Potassium Total ICAP	Sodium Total ICAP	Sulfate	Total Dissolved Solid (TDS)	Total Hardness as CaCO3 by ICP	Total Organic Carbon	Total Suspended Solids (TSS)	Uranium by ICPMS as pCi/L	Uranium ICAP/MS	
@ANIONS48	@VOASDWA	Alkalinity in CaCO3 units																					
Arsenic Total ICAP/MS	Calcium Total ICAP	Chloride																					
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Total Dissolved Solid (TDS)	Total Hardness as CaCO3 by ICP	Total Organic Carbon																					
Total Suspended Solids (TSS)	Uranium by ICPMS as pCi/L	Uranium ICAP/MS																					
202011190340	MB-INF-20201119	11/19/2020 1148																					
	<table border="1"> <tr> <td>@ANIONS48</td> <td>@VOASDWA</td> <td>Alkalinity in CaCO3 units</td> </tr> <tr> <td>Arsenic Total ICAP/MS</td> <td>Calcium Total ICAP</td> <td>Chloride</td> </tr> <tr> <td>Hexavalent chromium(Dissolved)</td> <td>Iron Total ICAP</td> <td>Magnesium Total ICAP</td> </tr> <tr> <td>Manganese Total ICAP/MS</td> <td>Oil and Grease by 1664(subbed)</td> <td>Perchlorate</td> </tr> <tr> <td>Potassium Total ICAP</td> <td>Sodium Total ICAP</td> <td>Sulfate</td> </tr> <tr> <td>Total Dissolved Solid (TDS)</td> <td>Total Hardness as CaCO3 by ICP</td> <td>Total Organic Carbon</td> </tr> <tr> <td>Total Suspended Solids (TSS)</td> <td>Uranium by ICPMS as pCi/L</td> <td>Uranium ICAP/MS</td> </tr> </table>	@ANIONS48	@VOASDWA	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Calcium Total ICAP	Chloride	Hexavalent chromium(Dissolved)	Iron Total ICAP	Magnesium Total ICAP	Manganese Total ICAP/MS	Oil and Grease by 1664(subbed)	Perchlorate	Potassium Total ICAP	Sodium Total ICAP	Sulfate	Total Dissolved Solid (TDS)	Total Hardness as CaCO3 by ICP	Total Organic Carbon	Total Suspended Solids (TSS)	Uranium by ICPMS as pCi/L	Uranium ICAP/MS	
@ANIONS48	@VOASDWA	Alkalinity in CaCO3 units																					
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Total Dissolved Solid (TDS)	Total Hardness as CaCO3 by ICP	Total Organic Carbon																					
Total Suspended Solids (TSS)	Uranium by ICPMS as pCi/L	Uranium ICAP/MS																					

Test Description

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

@VOASDWA -- Volatile Organics by GCMS

424644

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302																	
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang																	
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) BECKY CHEN																	
LABORATORY: Eurofins Eaton Analytical		REQUESTED ANALYSES																			
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		Please check box or fill in blank as needed.																			
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdiores@gsi-net.com; Provide EDD of sample results																					
LAB USE ONLY	SAMPLE ID	SAMPLING		NO. OF CONT.	MATRIX	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)		
		DATE	TIME																		
	GAC-1-20201119	11/19/2020	0830	2	Water	1	X														
	GAC-2-20201119	11/19/2020	0833	1	Water	1	X														
	GAC-3-20201119	11/19/2020	0836	1	Water	1	X														
	GAC-4-20201119	11/19/2020	0839	1	Water	1	X														
	IX-1-20201119	11/19/2020	0842	1	Water	1	X														
	IX-2-20201119	11/19/2020	0845	1	Water	1	X														
	IX-3-20201119	11/19/2020	0848	1	Water	1	X														
	IX-4-20201119	11/19/2020	0851	1	Water	1	X														
	GAC-1M-20201119	11/19/2020	0854	1	Water	1	X														
	GAC-2M-20201119	11/19/2020	0857	1	Water	1	X														
	GAC-3M-20201119	11/19/2020	0900	1	Water	1	X														
	GAC-4M-20201119	11/19/2020	0903	1	Water	1	X														
	IX-1M-20201119	11/19/2020	0906	1	Water	1	X														
	IX-2M-20201119	11/19/2020	0909	1	Water	1	X														
	IX-3M-20201119	11/19/2020	0912	1	Water	1	X														
	IX-4M-20201119	11/19/2020	0915	1	Water	1	X														
	LH-INF-20201119	11/19/2020	0918	1	Water	1	X														
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 11/19/20		Date: 11/19/20		Time: 1414		Time: 1416											
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 11/19/20		Date: 11/19/20		Time: 1414		Time: 1416											
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: 11/19/20		Date: 11/19/20		Time: 1414		Time: 1416											



904644

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070			PROJECT NAME: WRD Pilot																	
PROJECT CONTACT: Miae Jeon			PROJECT NO.: 5302																	
GLOBAL ID:			LAB CONTACT: Sophia Liang																	
E-MAIL: mjeon@gsi-net.com			SAMPLER(S): (PRINT) <i>becky Chen</i>																	
REQUESTED ANALYSES Please check box or fill in blank as needed.																				
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	Sulfate, Nitrate (as N), Nitrate (as NO ₃), Chloride (EPA 300.0) (SM 2320B)	Alkalinity (as CaCO ₃), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO ₃ (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)		
		DATE	TIME																	
	IX-5-20201119	11/19/2020	1100	Water	2	X	X													
	IX-6-20201119	11/19/2020	1103	Water		X	X													
	IX-7-20201119	11/19/2020	1106	Water		X	X													
	IX-8-20201119	11/19/2020	1109	Water		X	X													
	GAC-5-20201119	11/19/2020	1112	Water		X	X													
	GAC-6-20201119	11/19/2020	1115	Water		X	X													
	GAC-7-20201119	11/19/2020	1118	Water		X	X													
	GAC-8-20201119	11/19/2020	1121	Water		X	X													
	IX-5M-20201119	11/19/2020	1124	Water		X	X													
	IX-6M-20201119	11/19/2020	1127	Water		X	X													
	IX-7M-20201119	11/19/2020	1130	Water		X	X													
	IX-8M-20201119	11/19/2020	1133	Water		X	X													
	GAC-5M-20201119	11/19/2020	1136	Water		X	X													
	GAC-6M-20201119	11/19/2020	1139	Water		X	X													
	GAC-7M-20201119	11/19/2020	1142	Water		X	X													
	GAC-8M-20201119	11/19/2020	1145	Water		X	X													
	MB-INF-20201119	11/19/2020	1148	Water	14	X	X													
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature)													Date: 11/19/20	Time: 1:44
Relinquished by: (Signature)						Received by: (Signature) <i>[Signature]</i>													Date: 11/19/20	Time: 1:16
Relinquished by: (Signature)						Received by: (Signature)													Date:	Time:



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 688A (Observation = 4.0 °C) (Corr. Factor = 2 °C) (Final = 4.8 °C)

TYPE OF ICE: Real Synthetic No Ice Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) **Chemistry:** >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) **Microbiology, Distribution:** < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) **Microbiology, Surface Water:** < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 **Dioxin (1613 or 2,3,7,8 TCDD):** must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) **pH Check.** Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) **Chlorine check.** Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) **VOA and Radon Headspace:**

No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm
0340	6	1	1				
0340	7	1	1				
0340	8	1	1				

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: 	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
			Eurofins Eaton Analytical	4/19/20	14:16

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 904644
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944 exp 9-30-2021

REVISED REPORT. UPDATE SAMPLE ID PER CLIENT. SFL 01/14/2021.

Flags Legend:

J - Analyte is positively identified, but tentatively quantified as an estimate concentration. The analyte was either detected between MDL and MRL or did not meet any one of the required QC criteria.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202011190339	<u>LH-INF-20201119</u>			
11/24/2020 01:12	Alkalinity in CaCO3 units		200		mg/L	2.0
12/08/2020 22:22	Arsenic Total ICAP/MS		2.9	10	ug/L	1.0
11/24/2020 13:03	Calcium Total ICAP		110		mg/L	1.0
11/20/2020 03:33	Chloride		100	250	mg/L	2.5
11/23/2020 16:15	Chloroform (Trichloromethane)		0.64		ug/L	0.50
11/24/2020 13:28	Hexavalent chromium(Dissolved)		0.69		ug/L	0.020
11/24/2020 13:03	Magnesium Total ICAP		21		mg/L	0.10
11/20/2020 03:33	Nitrate as Nitrogen by IC		2.8	10	mg/L	0.50
11/20/2020 03:33	Nitrate as NO3 (calc)		12	45	mg/L	2.2
11/24/2020 13:03	Potassium Total ICAP		4.7		mg/L	1.0
11/24/2020 13:03	Sodium Total ICAP		69		mg/L	1.0
11/20/2020 03:33	Sulfate		170	250	mg/L	2.5
11/26/2020 15:12	Total Dissolved Solids (TDS)		630	500	mg/L	10
11/24/2020 14:30	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
11/20/2020 03:33	Total Nitrate, Nitrite-N, CALC		2.8		mg/L	0.10
12/12/2020 12:15	Total Organic Carbon		0.58		mg/L	0.20
11/23/2020 16:15	Total THM		0.64	80	ug/L	0.50
12/07/2020 14:15	Uranium by ICPMS as pCi/L		2.8		pCi/L	0.70
12/04/2020 19:26	Uranium ICAP/MS		4.2	30	ug/L	1.0
		202011190340	<u>MB-INF-20201119</u>			
11/24/2020 01:04	Alkalinity in CaCO3 units		160		mg/L	2.0
12/08/2020 22:25	Arsenic Total ICAP/MS		1.4	10	ug/L	1.0
11/24/2020 18:18	Calcium Total ICAP		64		mg/L	1.0
11/20/2020 03:46	Chloride		45	250	mg/L	2.5
11/24/2020 13:38	Hexavalent chromium(Dissolved)		0.48		ug/L	0.020
11/24/2020 18:18	Magnesium Total ICAP		12		mg/L	0.10
11/20/2020 03:46	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
11/20/2020 03:46	Nitrate as NO3 (calc)		12	45	mg/L	2.2
11/24/2020 18:18	Potassium Total ICAP		4.0		mg/L	1.0
11/24/2020 18:18	Sodium Total ICAP		53		mg/L	1.0
11/20/2020 03:46	Sulfate		71	250	mg/L	2.5
11/26/2020 15:13	Total Dissolved Solids (TDS)		370	500	mg/L	10
11/24/2020 20:31	Total Hardness as CaCO3 by ICP (calc)		210		mg/L	3.0
11/20/2020 03:46	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
12/12/2020 12:37	Total Organic Carbon		0.79		mg/L	0.20

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
Fax: (626) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 904644
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Samples Received on:
11/19/2020 1416

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
12/07/2020 14:15	Uranium by ICPMS as pCi/L		1.3		pCi/L	0.70
12/04/2020 19:29	Uranium ICAP/MS		1.9	30	ug/L	1.0

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution	
LH-INF-20201119 (202011190339)					Sampled on 11/19/2020 0918					
EPA 200.8 - ICPMS Metals										
11/20/20	12/08/20 22:22	1289519	1292914	(EPA 200.8)	Arsenic Total ICAP/MS	2.9	ug/L	1.0	1	
11/20/20	12/04/20 19:26	1289519	1291470	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1	
11/20/20	12/04/20 19:26	1289519	1291470	(EPA 200.8)	Uranium ICAP/MS	4.2	ug/L	1.0	1	
EPA 200.7 - ICP Metals										
11/20/20	11/24/20 13:03	1289519	1290274	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1	
11/20/20	11/24/20 13:03	1289519	1290274	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1	
11/20/20	11/24/20 13:03	1289519	1290274	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1	
11/20/20	11/24/20 13:03	1289519	1290274	(EPA 200.7)	Potassium Total ICAP	4.7	mg/L	1.0	1	
11/20/20	11/24/20 13:03	1289519	1290274	(EPA 200.7)	Sodium Total ICAP	69	mg/L	1.0	1	
SM 5310C - Total Organic Carbon										
12/12/20	12:15		1293760	(SM 5310C)	Total Organic Carbon	0.58	mg/L	0.20	1	
EPA 200.8 - Uranium by ICPMS as pCi/L										
12/07/20	14:15			(EPA 200.8)	Uranium by ICPMS as pCi/L	2.8 (c)	pCi/L	0.70	1	
SM 2340B - Total Hardness as CaCO3 by ICP										
11/24/20	14:30			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1	
EPA 218.6 - Hexavalent chromium(Dissolved)										
11/24/20	13:28		1290657	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.69	ug/L	0.020	1	
EPA 300.0 - Nitrate, Nitrite by EPA 300.0										
11/20/20	03:33		1289446	(EPA 300.0)	Nitrate as Nitrogen by IC	2.8	mg/L	0.50	5	
11/20/20	03:33		1289446	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5	
11/20/20	03:33		1289446	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5	
11/20/20	03:33		1289446	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.8	mg/L	0.10	1	
EPA 300.0 - Chloride, Sulfate by EPA 300.0										
11/20/20	03:33		1289447	(EPA 300.0)	Chloride	100	mg/L	2.5	5	
11/20/20	03:33		1289447	(EPA 300.0)	Sulfate	170	mg/L	2.5	5	
EPA 314.0 - Perchlorate										
11/20/20	18:41	(1)	1290017	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1	
EPA 1664 - Oil and Grease by 1664(subbed)										
11/28/20	12:49			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.98	1	
EPA 524.2 - Volatile Organics by GCMS										
11/23/20	11/23/20 16:15		1290249	1290251	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15		1290249	1290251	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15		1290249	1290251	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15		1290249	1290251	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1

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Report: 904644
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 Group: WRD Pilot [Set #1]

Water Replenishment District
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 4040 Paramount Blvd.
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Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Chloroform (Trichloromethane)	0.64	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1

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11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Total THM	0.64	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	1,2-Dichloroethane-d4	103	%		1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	4-Bromofluorobenzene	103	%		1
11/23/20	11/23/20 16:15	1290249	1290251	(EPA 524.2)	Toluene-d8	95	%		1
SM 2320B - Alkalinity in CaCO3 units									
	11/24/20 01:12		1290332	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
11/25/20	11/26/20 15:12	1290865	1290866	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	630	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	11/25/20 01:22		1290534	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

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MB-INF-20201119 (202011190340)					Sampled on 11/19/2020 1148					
EPA 200.8 - ICPMS Metals										
11/20/20	12/08/20 22:25	1289519	1292914	(EPA 200.8)	Arsenic Total ICAP/MS	1.4	ug/L	1.0	1	
11/20/20	12/04/20 19:29	1289519	1291470	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1	
11/20/20	12/04/20 19:29	1289519	1291470	(EPA 200.8)	Uranium ICAP/MS	1.9	ug/L	1.0	1	
EPA 200.7 - ICP Metals										
11/20/20	11/24/20 18:18	1289519	1290275	(EPA 200.7)	Calcium Total ICAP	64	mg/L	1.0	1	
11/20/20	11/24/20 18:18	1289519	1290275	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1	
11/20/20	11/24/20 18:18	1289519	1290275	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1	
11/20/20	11/24/20 18:18	1289519	1290275	(EPA 200.7)	Potassium Total ICAP	4.0	mg/L	1.0	1	
11/20/20	11/24/20 18:18	1289519	1290275	(EPA 200.7)	Sodium Total ICAP	53	mg/L	1.0	1	
SM 5310C - Total Organic Carbon										
12/12/20	12:37		1293760	(SM 5310C)	Total Organic Carbon	0.79	mg/L	0.20	1	
EPA 200.8 - Uranium by ICPMS as pCi/L										
12/07/20	14:15			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.3 (c)	pCi/L	0.70	1	
SM 2340B - Total Hardness as CaCO3 by ICP										
11/24/20	20:31			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	210 (c)	mg/L	3.0	1	
EPA 218.6 - Hexavalent chromium(Dissolved)										
11/24/20	13:38		1290657	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.48	ug/L	0.020	1	
EPA 300.0 - Nitrate, Nitrite by EPA 300.0										
11/20/20	03:46		1289446	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5	
11/20/20	03:46		1289446	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5	
11/20/20	03:46		1289446	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5	
11/20/20	03:46		1289446	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1	
EPA 300.0 - Chloride, Sulfate by EPA 300.0										
11/20/20	03:46		1289447	(EPA 300.0)	Chloride	45	mg/L	2.5	5	
11/20/20	03:46		1289447	(EPA 300.0)	Sulfate	71	mg/L	2.5	5	
EPA 314.0 - Perchlorate										
11/20/20	19:30	(1)	1290017	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1	
EPA 1664 - Oil and Grease by 1664(subbed)										
11/28/20	12:49			(EPA 1664)	Oil and Grease by 1664(subbed)	ND (J)	mg/L	0.97	1	
EPA 524.2 - Volatile Organics by GCMS										
11/23/20	11/23/20 22:04		1290249	1290251	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04		1290249	1290251	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04		1290249	1290251	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04		1290249	1290251	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1

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11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 11/19/2020 1416

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	1,2-Dichloroethane-d4	100	%		1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	4-Bromofluorobenzene	105	%		1
11/23/20	11/23/20 22:04	1290249	1290251	(EPA 524.2)	Toluene-d8	96	%		1
SM 2320B - Alkalinity in CaCO3 units									
	11/24/20 01:04		1290332	(SM 2320B)	Alkalinity in CaCO3 units	160	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
11/25/20	11/26/20 15:13	1290865	1290866	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	370	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	11/25/20 01:23		1290534	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

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Report: 904644
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1289446

202011190339 LH-INF-20201119
 202011190340 MB-INF-20201119

Analysis Date: 11/20/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1289447

202011190339 LH-INF-20201119
 202011190340 MB-INF-20201119

Analysis Date: 11/20/2020

Analyzed by: HL7J
 Analyzed by: HL7J

Perchlorate

Analytical Batch: 1290017

202011190339 LH-INF-20201119
 202011190340 MB-INF-20201119

Analysis Date: 11/20/2020

Analyzed by: H5VG
 Analyzed by: H5VG

Volatile Organics by GCMS

Prep Batch: 1290249 Analytical Batch: 1290251

202011190339 LH-INF-20201119
 202011190340 MB-INF-20201119

Analysis Date: 11/23/2020

Analyzed by: TR7W
 Analyzed by: TR7W

ICP Metals

Prep Batch: 1289519 Analytical Batch: 1290274

202011190339 LH-INF-20201119

Analysis Date: 11/24/2020

Analyzed by: NINA

ICP Metals

Prep Batch: 1289519 Analytical Batch: 1290275

202011190340 MB-INF-20201119

Analysis Date: 11/24/2020

Analyzed by: Y7TT

Alkalinity in CaCO3 units

Analytical Batch: 1290332

202011190339 LH-INF-20201119
 202011190340 MB-INF-20201119

Analysis Date: 11/24/2020

Analyzed by: ZS6I
 Analyzed by: ZS6I

Total Suspended Solids (TSS)

Analytical Batch: 1290534

202011190339 LH-INF-20201119
 202011190340 MB-INF-20201119

Analysis Date: 11/25/2020

Analyzed by: TJ52
 Analyzed by: TJ52

Hexavalent chromium(Dissolved)

Analytical Batch: 1290657

202011190339 LH-INF-20201119
 202011190340 MB-INF-20201119

Analysis Date: 11/24/2020

Analyzed by: TLH
 Analyzed by: TLH

Total Dissolved Solids (TDS)

Prep Batch: 1290865 Analytical Batch: 1290866

202011190339 LH-INF-20201119
 202011190340 MB-INF-20201119

Analysis Date: 11/26/2020

Analyzed by: TJ52
 Analyzed by: TJ52

ICPMS Metals

Prep Batch: 1289519 Analytical Batch: 1291470

Analysis Date: 12/04/2020

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Report: 904644
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

202011190339	LH-INF-20201119
202011190340	MB-INF-20201119

Analyzed by: AZS
Analyzed by: AZS

ICPMS Metals

Prep Batch: 1289519 Analytical Batch: 1292914

202011190339	LH-INF-20201119
202011190340	MB-INF-20201119

Analysis Date: 12/08/2020

Analyzed by: AZS
Analyzed by: AZS

Total Organic Carbon

Analytical Batch: 1293760

202011190339	LH-INF-20201119
202011190340	MB-INF-20201119

Analysis Date: 12/12/2020

Analyzed by: ZB2Z
Analyzed by: ZB2Z

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1289446					Analysis Date: 11/20/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.48	mg/L	99	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.46	mg/L	99	(90-110)	20	0.81
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0490	mg/L	98	(50-150)		
MRL_W	Nitrate as Nitrogen by IC		0.013	0.0123	mg/L	98	(50-150)		
MS_202011190295	Nitrate as Nitrogen by IC	0.11	1.3	1.49	mg/L	110	(80-120)		
MSD_202011190295	Nitrate as Nitrogen by IC	0.11	1.3	1.52	mg/L	113	(80-120)	20	2.1
LCS1	Nitrite Nitrogen by IC		1	0.994	mg/L	99	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.990	mg/L	99	(90-110)	20	0.40
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0537	mg/L	107	(50-150)		
MRL_W	Nitrite Nitrogen by IC		0.013	0.0130	mg/L	104	(50-150)		
MS_202011190295	Nitrite Nitrogen by IC	ND	0.5	0.398	mg/L	80	(80-120)		
MSD_202011190295	Nitrite Nitrogen by IC	ND	0.5	0.413	mg/L	83	(80-120)	20	3.7
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1289447					Analysis Date: 11/20/2020				
LCS1	Chloride		25	25.4	mg/L	102	(90-110)		
LCS2	Chloride		25	25.2	mg/L	101	(90-110)	20	0.79
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.446	mg/L	89	(50-150)		
MS_202011180511	Chloride	10	13	24.2	mg/L	110	(80-120)		
MS_202011190295	Chloride	8.2	13	22.0	mg/L	110	(80-120)		
MSD_202011180511	Chloride	10	13	24.2	mg/L	111	(80-120)	20	0.52
MSD_202011190295	Chloride	8.2	13	22.3	mg/L	112	(80-120)	20	1.5
LCS1	Sulfate		50	51.2	mg/L	102	(90-110)		
LCS2	Sulfate		50	50.8	mg/L	102	(90-110)	20	0.59
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.932	mg/L	93	(50-150)		
MRL_W	Sulfate		0.25	0.230	mg/L	92	(50-150)		
MS_202011180511	Sulfate	0.8	25	27.0	mg/L	105	(80-120)		
MS_202011190295	Sulfate	8.6	25	35.4	mg/L	107	(80-120)		
MSD_202011180511	Sulfate	0.8	25	27.2	mg/L	106	(80-120)	20	0.55
MSD_202011190295	Sulfate	8.6	25	36.2	mg/L	110	(80-120)	20	2.1

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Perchlorate by EPA 314.0									
Analytical Batch: 1290017					Analysis Date: 11/20/2020				
LCS1	Perchlorate		25	25.4	ug/L	102	(85-115)		
LCS2	Perchlorate		25	25.6	ug/L	102	(85-115)	15	0.78
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.71	ug/L	93	(75-125)		
MS_202011190102	Perchlorate	ND	25	24.2	ug/L	97	(80-120)		
MSD_202011190102	Perchlorate	ND	25	24.6	ug/L	98	(80-120)	15	1.6
Volatile Organics by GCMS by EPA 524.2									
Analytical Batch: 1290251					Analysis Date: 11/23/2020				
LCS1	1,1,1,2-Tetrachloroethane		5	4.66	ug/L	93	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.50	ug/L	90	(70-130)	20	3.5
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.420	ug/L	84	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.79	ug/L	96	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.66	ug/L	93	(70-130)	20	2.8
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	4.86	ug/L	97	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.83	ug/L	97	(70-130)	20	0.62
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.84	ug/L	97	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.66	ug/L	93	(70-130)	20	3.8
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,1-Dichloroethane		5	5.05	ug/L	101	(70-130)		
LCS2	1,1-Dichloroethane		5	4.89	ug/L	98	(70-130)	20	3.2
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.31	ug/L	106	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.00	ug/L	100	(70-130)	20	6.0
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1-Dichloropropene		5	4.89	ug/L	98	(70-130)		
LCS2	1,1-Dichloropropene		5	4.90	ug/L	98	(70-130)	20	0.20
MBLK	1,1-Dichloropropene			<0.5	ug/L				

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 904644
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,1-Dichloropropene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.84	ug/L	97	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.88	ug/L	98	(70-130)	20	0.82
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.560	ug/L	112	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.11	ug/L	102	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.09	ug/L	102	(70-130)	20	0.39
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.560	ug/L	112	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.86	ug/L	97	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.02	ug/L	100	(70-130)	20	3.2
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	5.34	ug/L	107	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.00	ug/L	100	(70-130)	20	6.6
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	1,2-Dichloroethane		5	4.90	ug/L	98	(70-130)		
LCS2	1,2-Dichloroethane		5	4.62	ug/L	92	(70-130)	20	5.9
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	99.2	%	99	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	105	%	105	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			99.2	%	99	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS1	1,2-Dichloropropane		5	4.71	ug/L	94	(70-130)		
LCS2	1,2-Dichloropropane		5	4.75	ug/L	95	(70-130)	20	0.85
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.440	ug/L	88	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	5.33	ug/L	107	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.88	ug/L	98	(70-130)	20	8.8
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	1,3-Dichloropropane		5	4.92	ug/L	98	(70-130)		
LCS2	1,3-Dichloropropane		5	4.76	ug/L	95	(70-130)	20	3.3
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.470	ug/L	94	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	2,2-Dichloropropane		5	5.09	ug/L	102	(70-130)		
LCS2	2,2-Dichloropropane		5	5.14	ug/L	103	(70-130)	20	0.98
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.530	ug/L	106	(50-150)		
LCS1	2-Butanone (MEK)		50	42.6	ug/L	85	(70-130)		
LCS2	2-Butanone (MEK)		50	42.3	ug/L	85	(70-130)	20	0.71
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	4.97	ug/L	99	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	109	%	109	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	110	%	110	(70-130)		
MBLK	4-Bromofluorobenzene (S)			104	%	104	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	105	%	105	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	105	%	105	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	44.4	ug/L	89	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	44.7	ug/L	90	(70-130)	20	0.67
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.33	ug/L	87	(50-150)		
LCS1	Benzene		5	4.98	ug/L	100	(70-130)		
LCS2	Benzene		5	4.93	ug/L	99	(70-130)	20	1.0
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Bromobenzene		5	5.22	ug/L	104	(70-130)		
LCS2	Bromobenzene		5	5.15	ug/L	103	(70-130)	20	1.4
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromochloromethane		5	4.92	ug/L	98	(70-130)		
LCS2	Bromochloromethane		5	4.93	ug/L	99	(70-130)	20	0.20
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Bromodichloromethane		5	4.92	ug/L	98	(70-130)		
LCS2	Bromodichloromethane		5	4.73	ug/L	95	(70-130)	20	3.9
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Bromoethane		5	5.36	ug/L	107	(70-130)		
LCS2	Bromoethane		5	5.13	ug/L	103	(70-130)	20	4.4
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Bromoform		5	4.94	ug/L	99	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Bromoform		5	4.67	ug/L	93	(70-130)	20	5.6
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.430	ug/L	86	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.44	ug/L	109	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	4.73	ug/L	95	(70-130)	20	14
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.660	ug/L	132	(50-150)		
LCS1	Carbon disulfide		5	5.00	ug/L	100	(70-130)		
LCS2	Carbon disulfide		5	4.50	ug/L	90	(70-130)	20	11
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.520	ug/L	104	(50-150)		
LCS1	Carbon Tetrachloride		5	5.05	ug/L	101	(70-130)		
LCS2	Carbon Tetrachloride		5	4.89	ug/L	98	(70-130)	20	3.2
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.490	ug/L	98	(50-150)		
LCS1	Chlorobenzene		5	4.95	ug/L	99	(70-130)		
LCS2	Chlorobenzene		5	4.85	ug/L	97	(70-130)	20	2.0
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Chlorodibromomethane		5	4.79	ug/L	96	(70-130)		
LCS2	Chlorodibromomethane		5	4.54	ug/L	91	(70-130)	20	5.4
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	Chloroethane		5	5.11	ug/L	102	(70-130)		
LCS2	Chloroethane		5	4.89	ug/L	98	(70-130)	20	4.4
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	5.05	ug/L	101	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.03	ug/L	101	(70-130)	20	0.40
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.76	ug/L	95	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.43	ug/L	89	(70-130)	20	7.2
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.580	ug/L	116	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.98	ug/L	100	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.92	ug/L	98	(70-130)	20	1.2
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.500	ug/L	100	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.71	ug/L	94	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.57	ug/L	91	(70-130)	20	3.0
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.440	ug/L	88	(50-150)		
LCS1	Dibromomethane		5	4.67	ug/L	93	(70-130)		
LCS2	Dibromomethane		5	4.72	ug/L	94	(70-130)	20	1.1
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Dichlorodifluoromethane		5	5.23	ug/L	105	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.74	ug/L	95	(70-130)	20	9.8
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Dichloromethane		5	5.07	ug/L	101	(70-130)		
LCS2	Dichloromethane		5	4.87	ug/L	97	(70-130)	20	4.0
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.670	ug/L	134	(50-150)		
LCS1	Di-isopropyl ether		5	4.76	ug/L	95	(70-130)		
LCS2	Di-isopropyl ether		5	4.74	ug/L	95	(70-130)	20	0.42
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.500	ug/L	100	(50-150)		
LCS1	Ethyl benzene		5	5.07	ug/L	101	(70-130)		
LCS2	Ethyl benzene		5	4.96	ug/L	99	(70-130)	20	2.2
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Hexachlorobutadiene		5	4.88	ug/L	98	(70-130)		
LCS2	Hexachlorobutadiene		5	4.95	ug/L	99	(70-130)	20	1.4
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.580	ug/L	116	(50-150)		
LCS1	Isopropylbenzene		5	5.35	ug/L	107	(70-130)		
LCS2	Isopropylbenzene		5	5.30	ug/L	106	(70-130)	20	0.94
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.490	ug/L	98	(50-150)		
LCS1	m,p-Xylenes		10	10.2	ug/L	102	(70-130)		
LCS2	m,p-Xylenes		10	9.85	ug/L	99	(70-130)	20	3.5
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.900	ug/L	90	(50-150)		
MRLW	m,p-Xylenes		0.5	0.510	ug/L	102	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 904644
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 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	m-Dichlorobenzene (1,3-DCB)		5	5.33	ug/L	107	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.22	ug/L	104	(70-130)	20	2.1
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.510	ug/L	102	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.85	ug/L	97	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.86	ug/L	97	(70-130)	20	0.21
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.670	ug/L	134	(50-150)		
LCS1	Naphthalene		5	4.68	ug/L	94	(70-130)		
LCS2	Naphthalene		5	4.89	ug/L	98	(70-130)	20	4.4
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.510	ug/L	102	(50-150)		
LCS1	n-Butylbenzene		5	5.10	ug/L	102	(70-130)		
LCS2	n-Butylbenzene		5	5.00	ug/L	100	(70-130)	20	2.0
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	n-Propylbenzene		5	5.40	ug/L	108	(70-130)		
LCS2	n-Propylbenzene		5	5.16	ug/L	103	(70-130)	20	4.5
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.490	ug/L	98	(50-150)		
LCS1	o-Chlorotoluene		5	5.44	ug/L	109	(70-130)		
LCS2	o-Chlorotoluene		5	5.18	ug/L	104	(70-130)	20	4.9
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.530	ug/L	106	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.86	ug/L	97	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.02	ug/L	100	(70-130)	20	3.2
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.520	ug/L	104	(50-150)		
LCS1	o-Xylene		5	4.97	ug/L	99	(70-130)		
LCS2	o-Xylene		5	4.63	ug/L	93	(70-130)	20	7.1
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.450	ug/L	90	(50-150)		
LCS1	p-Chlorotoluene		5	5.29	ug/L	106	(70-130)		
LCS2	p-Chlorotoluene		5	5.19	ug/L	104	(70-130)	20	1.9
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.520	ug/L	104	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.32	ug/L	106	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.26	ug/L	105	(70-130)	20	1.1

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.520	ug/L	104	(50-150)		
LCS1	p-Isopropyltoluene		5	5.42	ug/L	108	(70-130)		
LCS2	p-Isopropyltoluene		5	5.26	ug/L	105	(70-130)	20	3.0
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.490	ug/L	98	(50-150)		
LCS1	sec-Butylbenzene		5	5.37	ug/L	107	(70-130)		
LCS2	sec-Butylbenzene		5	5.41	ug/L	108	(70-130)	20	0.74
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Styrene		5	4.66	ug/L	93	(70-130)		
LCS2	Styrene		5	4.05	ug/L	81	(70-130)	20	14
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.430	ug/L	86	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.61	ug/L	92	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.75	ug/L	95	(70-130)	20	3.0
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.470	ug/L	94	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.82	ug/L	96	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.72	ug/L	94	(70-130)	20	2.1
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.480	ug/L	96	(50-150)		
LCS1	tert-Butylbenzene		5	5.27	ug/L	105	(70-130)		
LCS2	tert-Butylbenzene		5	5.35	ug/L	107	(70-130)	20	1.5
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.490	ug/L	98	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	5.09	ug/L	102	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.96	ug/L	99	(70-130)	20	2.6
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Toluene		5	4.92	ug/L	98	(70-130)		
LCS2	Toluene		5	4.79	ug/L	96	(70-130)	20	2.7
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Toluene-d8 (S)		5	99.0	%	99	(70-130)		
LCS2	Toluene-d8 (S)		5	102	%	102	(70-130)		
MBLK	Toluene-d8 (S)			95.4	%	95	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	97.6	%	98	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRLW	Toluene-d8 (S)		5	97.6	%	98	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	5.09	ug/L	102	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.83	ug/L	97	(70-130)	20	5.2
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.540	ug/L	108	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.50	ug/L	90	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.47	ug/L	89	(70-130)	20	0.67
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.420	ug/L	84	(50-150)		
LCS1	Trichloroethylene (TCE)		5	5.00	ug/L	100	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.70	ug/L	94	(70-130)	20	6.2
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.500	ug/L	100	(50-150)		
LCS1	Trichlorofluoromethane		5	5.28	ug/L	106	(70-130)		
LCS2	Trichlorofluoromethane		5	5.00	ug/L	100	(70-130)	20	5.5
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.32	ug/L	106	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	5.21	ug/L	104	(70-130)	20	2.1
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Vinyl chloride (VC)		5	5.26	ug/L	105	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.98	ug/L	100	(70-130)	20	5.5
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.530	ug/L	106	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.240	ug/L	96	(50-150)		

ICP Metals by EPA 200.7

Analytical Batch: 1290274

Analysis Date: 11/24/2020

LCS1	Calcium Total ICAP		50	43.8	mg/L	88	(85-115)		
LCS2	Calcium Total ICAP		50	43.7	mg/L	87	(85-115)	20	0.23
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	0.995	mg/L	100	(50-150)		
MS_202011230130	Calcium Total ICAP	20	50	70.3	mg/L	100	(70-130)		
MS2_202011190296	Calcium Total ICAP	5.2	50	55.4	mg/L	100	(70-130)		
MSD_202011230130	Calcium Total ICAP	20	50	69.4	mg/L	98	(70-130)	20	1.3
MSD2_202011190296	Calcium Total ICAP	5.2	50	55.3	mg/L	100	(70-130)	20	0.24
LCS1	Iron Total ICAP		5	4.36	mg/L	87	(85-115)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Iron Total ICAP		5	4.34	mg/L	87	(85-115)	20	0.46
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0203	mg/L	101	(50-150)		
MS_202011230130	Iron Total ICAP	ND	5	5.12	mg/L	102	(70-130)		
MS2_202011190296	Iron Total ICAP	0.043	5	5.05	mg/L	100	(70-130)		
MSD_202011230130	Iron Total ICAP	ND	5	5.05	mg/L	101	(70-130)	20	1.4
MSD2_202011190296	Iron Total ICAP	0.043	5	5.03	mg/L	100	(70-130)	20	0.38
LCS1	Magnesium Total ICAP		20	17.3	mg/L	87	(85-115)		
LCS2	Magnesium Total ICAP		20	17.2	mg/L	86	(85-115)	20	0.0
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0982	mg/L	98	(50-150)		
MS_202011230130	Magnesium Total ICAP	7.1	20	27.5	mg/L	102	(70-130)		
MS2_202011190296	Magnesium Total ICAP	1.2	20	21.3	mg/L	101	(70-130)		
MSD_202011230130	Magnesium Total ICAP	7.1	20	27.1	mg/L	100	(70-130)	20	1.4
MSD2_202011190296	Magnesium Total ICAP	1.2	20	21.2	mg/L	100	(70-130)	20	0.13
LCS1	Potassium Total ICAP		20	17.8	mg/L	89	(85-115)		
LCS2	Potassium Total ICAP		20	17.8	mg/L	89	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.715	mg/L	72	(50-150)		
MS_202011230130	Potassium Total ICAP	ND	20	22.4	mg/L	108	(70-130)		
MS2_202011190296	Potassium Total ICAP	1.5	20	22.4	mg/L	104	(70-130)		
MSD_202011230130	Potassium Total ICAP	ND	20	22.2	mg/L	106	(70-130)	20	1.0
MSD2_202011190296	Potassium Total ICAP	1.5	20	22.4	mg/L	104	(70-130)	20	0.0058
LCS1	Sodium Total ICAP		50	43.6	mg/L	87	(85-115)		
LCS2	Sodium Total ICAP		50	43.4	mg/L	87	(85-115)	20	0.46
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.980	mg/L	98	(50-150)		
MS_202011230130	Sodium Total ICAP	27	50	75.3	mg/L	97	(70-130)		
MS2_202011190296	Sodium Total ICAP	6.1	50	54.9	mg/L	98	(70-130)		
MSD_202011230130	Sodium Total ICAP	27	50	74.3	mg/L	95	(70-130)	20	1.3
MSD2_202011190296	Sodium Total ICAP	6.1	50	54.7	mg/L	97	(70-130)	20	0.40

ICP Metals by EPA 200.7

Analytical Batch: 1290275

Analysis Date: 11/24/2020

LCS1	Calcium Total ICAP		50	51.4	mg/L	103	(85-115)		
LCS2	Calcium Total ICAP		50	50.8	mg/L	102	(85-115)	20	1.2
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.00	mg/L	100	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202011200148	Calcium Total ICAP	33	50	83.8	mg/L	101	(70-130)		
MS2_202011190483	Calcium Total ICAP	ND	50	51.8	mg/L	104	(70-130)		
MSD_202011200148	Calcium Total ICAP	33	50	83.4	mg/L	100	(70-130)	20	0.54
MSD2_202011190483	Calcium Total ICAP	ND	50	51.9	mg/L	104	(70-130)	20	0.17
LCS1	Iron Total ICAP		5	5.16	mg/L	103	(85-115)		
LCS2	Iron Total ICAP		5	5.10	mg/L	102	(85-115)	20	1.2
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0208	mg/L	104	(50-150)		
MS_202011200148	Iron Total ICAP	ND	5	5.26	mg/L	105	(70-130)		
MS2_202011190483	Iron Total ICAP	ND	5	5.19	mg/L	104	(70-130)		
MSD_202011200148	Iron Total ICAP	ND	5	5.18	mg/L	104	(70-130)	20	1.6
MSD2_202011190483	Iron Total ICAP	ND	5	5.20	mg/L	104	(70-130)	20	0.16
LCS1	Magnesium Total ICAP		20	20.4	mg/L	102	(85-115)		
LCS2	Magnesium Total ICAP		20	20.1	mg/L	101	(85-115)	20	1.5
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0986	mg/L	99	(50-150)		
MS_202011200148	Magnesium Total ICAP	3.1	20	24.0	mg/L	104	(70-130)		
MS2_202011190483	Magnesium Total ICAP	ND	20	20.8	mg/L	104	(70-130)		
MSD_202011200148	Magnesium Total ICAP	3.1	20	23.7	mg/L	103	(70-130)	20	1.1
MSD2_202011190483	Magnesium Total ICAP	ND	20	20.8	mg/L	104	(70-130)	20	0.11
LCS1	Potassium Total ICAP		20	20.5	mg/L	103	(85-115)		
LCS2	Potassium Total ICAP		20	20.3	mg/L	102	(85-115)	20	0.98
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.686	mg/L	69	(50-150)		
MS_202011200148	Potassium Total ICAP	4.3	20	26.0	mg/L	109	(70-130)		
MS2_202011190483	Potassium Total ICAP	ND	20	21.0	mg/L	105	(70-130)		
MSD_202011200148	Potassium Total ICAP	4.3	20	25.8	mg/L	107	(70-130)	20	0.97
MSD2_202011190483	Potassium Total ICAP	ND	20	21.1	mg/L	106	(70-130)	20	0.31
LCS1	Sodium Total ICAP		50	50.8	mg/L	102	(85-115)		
LCS2	Sodium Total ICAP		50	50.2	mg/L	100	(85-115)	20	1.2
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.915	mg/L	92	(50-150)		
MS_202011200148	Sodium Total ICAP	15	50	66.2	mg/L	102	(70-130)		
MS2_202011190483	Sodium Total ICAP	ND	50	51.4	mg/L	102	(70-130)		
MSD_202011200148	Sodium Total ICAP	15	50	65.2	mg/L	100	(70-130)	20	1.6
MSD2_202011190483	Sodium Total ICAP	ND	50	51.5	mg/L	102	(70-130)	20	0.24

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Alkalinity in CaCO3 units by SM 2320B									
Analytical Batch: 1290332					Analysis Date: 11/23/2020				
LCS1	Alkalinity in CaCO3 units		100	97.9	mg/L	98	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.0	mg/L	98	(90-110)	20	0.20
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.13	mg/L	107	(50-150)		
MS_202011180172	Alkalinity in CaCO3 units	58	100	162	mg/L	104	(80-120)		
MS_202011190294	Alkalinity in CaCO3 units	93	100	191	mg/L	98	(80-120)		
MSD_202011180172	Alkalinity in CaCO3 units	58	100	162	mg/L	104	(80-120)	20	0.099
MSD_202011190294	Alkalinity in CaCO3 units	93	100	191	mg/L	98	(80-120)	20	0.031
Total Suspended Solids (TSS) by SM 2540D									
Analytical Batch: 1290534					Analysis Date: 11/25/2020				
DUP_202010140042	Total Suspended Solids (TSS)	220		216	mg/L		(0-10)	10	2.7
DUP_202010140072	Total Suspended Solids (TSS)	66		64.0	mg/L		(0-10)	10	3.1
LCS1	Total Suspended Solids (TSS)		175	162	mg/L	93	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	172	mg/L	98	(71-107)	20	6.0
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	5.00	mg/L	50	(50-150)		
Hexavalent chromium(Dissolved) by EPA 218.6									
Analytical Batch: 1290657					Analysis Date: 11/24/2020				
LCS1	Hexavalent chromium(Dissolved)		2	1.96	ug/L	98	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.96	ug/L	98	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0191	ug/L	96	(50-150)		
MS_202011200115	Hexavalent chromium(Dissolved)	1.1	2	3.16	ug/L	103	(90-110)		
MSD_202011200115	Hexavalent chromium(Dissolved)	1.1	2	3.15	ug/L	103	(90-110)	20	0.19
Total Dissolved Solids (TDS) by E160.1/SM2540C									
Analytical Batch: 1290866					Analysis Date: 11/26/2020				
DUP_202011190210	Total Dissolved Solid (TDS)	720		694	mg/L		(0-10)	10	4.0
DUP_202011200148	Total Dissolved Solid (TDS)	140		142	mg/L		(0-10)	10	1.4
LCS1	Total Dissolved Solid (TDS)		175	176	mg/L	101	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	678	mg/L	97	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	8.00	mg/L	80	(50-150)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 904644
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
ICPMS Metals by EPA 200.8									
Analytical Batch: 1291470					Analysis Date: 12/04/2020				
LCS1	Arsenic Total ICAP/MS		50	48.7	ug/L	97	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.1	ug/L	96	(85-115)	20	1.2
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.571	ug/L	57	(50-150)		
MS_202011250263	Arsenic Total ICAP/MS	ND	50	54.2	ug/L	108	(70-130)		
MS2_202011200357	Arsenic Total ICAP/MS	ND	50	54.1	ug/L	108	(70-130)		
MSD_202011250263	Arsenic Total ICAP/MS	ND	50	52.9	ug/L	105	(70-130)	20	2.4
MSD2_202011200357	Arsenic Total ICAP/MS	ND	50	44.1	ug/L	88	(70-130)	20	20
LCS1	Manganese Total ICAP/MS		100	99.1	ug/L	99	(85-115)		
LCS2	Manganese Total ICAP/MS		100	98.5	ug/L	99	(85-115)	20	0.61
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.07	ug/L	104	(50-150)		
MS_202011250263	Manganese Total ICAP/MS	ND	100	104	ug/L	104	(70-130)		
MS2_202011200357	Manganese Total ICAP/MS	5.7	100	111	ug/L	105	(70-130)		
MSD_202011250263	Manganese Total ICAP/MS	ND	100	103	ug/L	102	(70-130)	20	1.5
MSD2_202011200357	Manganese Total ICAP/MS	5.7	100	90.5	ug/L	85	(70-130)	20	20
LCS1	Uranium ICAP/MS		50	49.9	ug/L	100	(85-115)		
LCS2	Uranium ICAP/MS		50	50.2	ug/L	100	(85-115)	20	0.60
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.949	ug/L	95	(50-150)		
MS_202011250263	Uranium ICAP/MS	2.3	50	57.5	ug/L	111	(70-130)		
MS2_202011200357	Uranium ICAP/MS	12	50	73.1	ug/L	122	(70-130)		
MSD_202011250263	Uranium ICAP/MS	2.3	50	57.8	ug/L	111	(70-130)	20	0.47
MSD2_202011200357	Uranium ICAP/MS	12	50	57.0	ug/L	90	(70-130)	20	<u>25</u>

ICPMS Metals by EPA 200.8

Analytical Batch: 1292914

Analysis Date: 12/08/2020

LCS1	Arsenic Total ICAP/MS		50	49.2	ug/L	98	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	50.2	ug/L	100	(85-115)	20	2.0
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.828	ug/L	83	(50-150)		
MS_202012050005	Arsenic Total ICAP/MS	ND	50	51.4	ug/L	103	(70-130)		
MS2_202011250124	Arsenic Total ICAP/MS	11	50	58.8	ug/L	95	(70-130)		
MSD_202012050005	Arsenic Total ICAP/MS	ND	50	52.9	ug/L	106	(70-130)	20	3.0
MSD2_202011250124	Arsenic Total ICAP/MS	11	50	59.5	ug/L	97	(70-130)	20	1.1
LCS1	Manganese Total ICAP/MS		100	106	ug/L	106	(85-115)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Manganese Total ICAP/MS		100	107	ug/L	107	(85-115)	20	0.94
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.12	ug/L	106	(50-150)		
MS_202012050005	Manganese Total ICAP/MS	ND	100	100	ug/L	100	(70-130)		
MS2_202011250124	Manganese Total ICAP/MS	ND	100	97.7	ug/L	96	(70-130)		
MSD_202012050005	Manganese Total ICAP/MS	ND	100	104	ug/L	104	(70-130)	20	3.6
MSD2_202011250124	Manganese Total ICAP/MS	ND	100	98.8	ug/L	97	(70-130)	20	1.1
LCS1	Uranium ICAP/MS		50	51.6	ug/L	103	(85-115)		
LCS2	Uranium ICAP/MS		50	52.7	ug/L	105	(85-115)	20	2.1
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.996	ug/L	100	(50-150)		
MS_202012050005	Uranium ICAP/MS	ND	50	51.7	ug/L	103	(70-130)		
MS2_202011250124	Uranium ICAP/MS	5.9	50	59.3	ug/L	107	(70-130)		
MSD_202012050005	Uranium ICAP/MS	ND	50	54.2	ug/L	108	(70-130)	20	4.7
MSD2_202011250124	Uranium ICAP/MS	5.9	50	61.5	ug/L	111	(70-130)	20	3.7

Total Organic Carbon by SM 5310C
Analytical Batch: 1293760

Analysis Date: 12/12/2020

LCS1	Total Organic Carbon		5	5.37	mg/L	107	(90-110)		
LCS2	Total Organic Carbon		5	5.36	mg/L	107	(90-110)	20	0.19
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.254	mg/L	127	(50-150)		
MS_202011200482	Total Organic Carbon	0.84	4	4.78	mg/L	99	(80-120)		
MS2_202011230116	Total Organic Carbon	0.21	2	2.26	mg/L	102	(80-120)		
MSD_202011200482	Total Organic Carbon	0.84	4	5.06	mg/L	106	(80-120)	20	5.8
MSD2_202011230116	Total Organic Carbon	0.21	2	2.32	mg/L	106	(80-120)	20	3.3

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	Fecal Coliform

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 01/14/2021

Quant Report - Page 1 of 1

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)* (Tot, E., Coli)

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required:
Comment:
Approved by:

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 01/14/2021

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 01/14/2021

Quant Report - Page 1 of 1

Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-44389-1
Client Project/Site: 904644

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
12/4/2020 4:00:18 PM

Lori Thompson, Project Manager I
(714)895-5494
Lori.Thompson@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 904644

Job ID: 570-44389-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 904644

Job ID: 570-44389-1

Job ID: 570-44389-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-44389-1

Comments

No additional comments.

Receipt

The samples were received on 11/20/2020 11:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-112025

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 904644

Job ID: 570-44389-1

Client Sample ID: 202011190339

Lab Sample ID: 570-44389-1

No Detections.

Client Sample ID: 202011190340

Lab Sample ID: 570-44389-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	0.773	J	0.966	0.773	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 904644

Job ID: 570-44389-1

General Chemistry

Client Sample ID: 202011190339

Date Collected: 11/19/20 09:18

Date Received: 11/20/20 11:30

Lab Sample ID: 570-44389-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.977	0.781	mg/L		11/24/20 09:47	11/28/20 12:49	1

Client Sample ID: 202011190340

Date Collected: 11/19/20 11:48

Date Received: 11/20/20 11:30

Lab Sample ID: 570-44389-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	0.773	J	0.966	0.773	mg/L		11/24/20 09:47	11/28/20 12:49	1

QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 904644

Job ID: 570-44389-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-112025/1-A
Matrix: Water
Analysis Batch: 112667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 112025

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		11/24/20 09:47	11/28/20 12:49	1

Lab Sample ID: LCS 570-112025/2-A
Matrix: Water
Analysis Batch: 112667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 112025

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	36.30		mg/L		91	78 - 114

Lab Sample ID: LCSD 570-112025/3-A
Matrix: Water
Analysis Batch: 112667

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 112025

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.50		mg/L		91	78 - 114	1	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 904644

Job ID: 570-44389-1

General Chemistry

Prep Batch: 112025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-44389-1	202011190339	Total/NA	Water	1664A	
570-44389-2	202011190340	Total/NA	Water	1664A	
MB 570-112025/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-112025/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-112025/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 112667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-44389-1	202011190339	Total/NA	Water	1664A	112025
570-44389-2	202011190340	Total/NA	Water	1664A	112025
MB 570-112025/1-A	Method Blank	Total/NA	Water	1664A	112025
LCS 570-112025/2-A	Lab Control Sample	Total/NA	Water	1664A	112025
LCSD 570-112025/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	112025

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 904644

Job ID: 570-44389-1

Client Sample ID: 202011190339

Lab Sample ID: 570-44389-1

Date Collected: 11/19/20 09:18

Matrix: Water

Date Received: 11/20/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1024 mL	1000 mL	112025	11/24/20 09:47	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			112667	11/28/20 12:49	USUL	ECL 1

Instrument ID: NOEQUIP

Client Sample ID: 202011190340

Lab Sample ID: 570-44389-2

Date Collected: 11/19/20 11:48

Matrix: Water

Date Received: 11/20/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1035 mL	1000 mL	112025	11/24/20 09:47	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			112667	11/28/20 12:49	USUL	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 904644

Job ID: 570-44389-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-20
California	State	2944	09-30-21
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

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Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 904644

Job ID: 570-44389-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 904644

Job ID: 570-44389-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-44389-1	202011190339	Water	11/19/20 09:18	11/20/20 11:30	
570-44389-2	202011190340	Water	11/19/20 11:48	11/20/20 11:30	

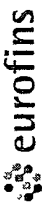
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44389 Date: 11/20/2020


Submittal Form

***REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**
Report & Invoice must have the Folder# 904644 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.
Results must have Complete data & QC with Approval Signature.

 Eaton Analytical	
Ship To: Eurofins CalScience 7440 Lincoln Way Garden Grove, CA 92641-1432 Phone: 714-895-5494 Fax: 714-894-7501	
Folder #: 904644	Report Due: 12/07/2020

Reports: Jackie Contreras Sub-Contracting Administrator EMAIL TO: Eaton-MonroviaSubContract@eurofins.com Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016 Phone (626) 386-1165 Fax (626) 386-1122 Invoices to: Eurofins Eaton Analytical, LLC Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605	Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix. Samples from: CALIFORNIA
--	---

 570-44389 Chain of Custody	
---	--

Sample ID 202011190339	Client Sample ID for reference on! LH-INF	Sample Date & Time Matrix 11/19/20 0918 DW	PWS Systemcode PWSID	JLS
Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:
Method EPA 1664	Prep Method Oil and Grease by 1664(subbed)	Analysis Requested		
Sample ID 202011190340	Client Sample ID for reference on! MB-INF	Sample Date & Time Matrix 11/19/20 1148 DW	PWS Systemcode PWSID	JLS
Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:
Method EPA-1664	Prep Method Oil and Grease by 1664(subbed)	Analysis Requested		

Relinquished by:	Date	Time	NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS	
Received by:	Date	Time	An Acknowledgement of Receipt is requested to attn: Jackie Contreras	
Relinquished by:	Date	Time	28/2,0 5CB	
Received by:	Date	Time		

Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-44389-1

Login Number: 44389

List Source: Eurofins Calscience

List Number: 1

Creator: Ramos, Maribel

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 906889
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 906889
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **December 04, 2020 at 1322**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202012040189</u>	GAC-1-20201204 Static ID: 537.1 @537.1	12/04/2020 1015
<u>202012040190</u>	GAC-2-20201204 Static ID: 537.1 @537.1	12/04/2020 1018
<u>202012040191</u>	GAC-3-20201204 Static ID: 537.1 @537.1	12/04/2020 1021
<u>202012040192</u>	GAC-4-20201204 Static ID: 537.1 @537.1	12/04/2020 1024
<u>202012040193</u>	IX-1-20201204 Static ID: 537.1 @537.1	12/04/2020 1027
<u>202012040194</u>	IX-2-20201204 Static ID: 537.1 @537.1	12/04/2020 1030
<u>202012040195</u>	IX-3-20201204 Static ID: 537.1 @537.1	12/04/2020 1033
<u>202012040196</u>	IX-4-20201204 Static ID: 537.1 @537.1	12/04/2020 1036
<u>202012040197</u>	GAC-5-20201204 @537.1	12/04/2020 1230
<u>202012040198</u>	GAC-6-20201204 @537.1	12/04/2020 1233
<u>202012040201</u>	GAC-7-20201204 @537.1	12/04/2020 1236
<u>202012040202</u>	GAC-8-20201204	12/04/2020 1239

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 906889
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **December 04, 2020 at 1322**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202012040203	IX-5-20201204	12/04/2020 1242
	@537.1	
202012040204	IX-6-20201204	12/04/2020 1245
	@537.1	
202012040205	IX-7-20201204	12/04/2020 1248
	@537.1	
202012040206	IX-8-20201204	12/04/2020 1251
	@537.1	

Test Description

@537.1 -- EPA Method 537.1



Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629
Phone: 626 386 1100
Fax: 626 386 1101
800 566 LABS (800 566 5227)
Website: www.EatonAnalytical.com

CHAIN OF CUSTODY RECORD

906889

EUROFINS EATON ANALYTICAL USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED AGAINST COC BY: CB

SAMPLES LOGGED IN BY: CB

SAMPLE TEMP RECEIVED AT: _____

(Other) IR Gun ID = _____ (Observation = _____ °C) (check for yes)

Monrovia IR Gun ID = 616 (Observation = 7.8 °C) (Final = _____ °C)

(Microbiology: < 10°C)

TYPE OF ICE: Real Synthetic _____ No Ice _____

CONDITION OF ICE: Frozen _____ Partially Frozen _____ Thawed _____

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME: GSI Environmental Inc.

19200 Von Karman Ave, Ste 300

Irving, CA 91612

EEA CLIENT CODE: G001B: Lab Contact:

Sophia Liang

PROJECT CODE: WRD Pilot

Proj #: 5302

Proj Contact: Miae Jean

mjean@asi-net.com

SAMPLE GROUP: Notes:

Provide EDD

COMPLIANCE SAMPLES **NON-COMPLIANCE SAMPLES** (check for yes)

- Requires state forms _____

REGULATION INVOLVED: _____

Type of samples (circle one): ROUTINE SPECIAL CONFIRMATION (eg. SDWA, NPDES, etc.)

SEE ATTACHED KIT ORDER FOR ANALYSES (check for yes), OR

List ALL ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)

TAT requested: rush by adv notice only

STD 1 wk ___ 3 day ___ 2 day ___ 1 day ___

SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX	FIELD DATA	FIELD DATA	SAMPLER COMMENTS
12-4	1015	GAC-1-20201204		Water			
1	1918	GAC-2-20201204					
1	1921	GAC-3-20201204					
1	1924	GAC-4-20201204					
1	1927	IX-1-20201204					
1	1930	IX-2-20201204					
1	1933	IX-3-20201204					
1	1936	IX-4-20201204					

*** MATRIX TYPES:** RSW = Raw Surface Water
RGW = Raw Ground Water
CFW = Chlor(am)inated Finished Water
FW = Other Finished Water
SEAW = Sea Water
WW = Waste Water
BW = Bottled Water
SW = Storm Water
SO = Soil
SL = Sludge

SIGNED BY: Robert Torres

RELINQUISHED BY: Robert Torres

RECEIVED BY: Chuck Broach

RELINQUISHED BY: _____

RECEIVED BY: _____

SIGNATURE **PRINT NAME** **COMPANY/TITLE** **DATE** **TIME**

<u>Robert Torres</u>	<u>Robert Torres</u>	<u>GSI</u>	<u>12-4-2020</u>	<u>1322</u>
<u>Robert Torres</u>	<u>Robert Torres</u>	<u>GSI</u>	<u>12-4-2020</u>	<u>1322</u>
<u>Chuck Broach</u>	<u>Chuck Broach</u>	<u>GSI</u>	<u>12-4-20</u>	<u>1322</u>

QA FO 0029.2 (Version 2) (09/28/2014)



Eaton Analytical

CHAIN OF CUSTODY RECORD

EUROFINS EATON ANALYTICAL USE ONLY:

750 Royal Oaks Drive, Suite 100
 Monrovia, CA 91016-3629
 Phone: 626 386 1100
 Fax: 626 386 1101
 800 566 LABS (800 566 5227)
 Website: www.EatonAnalytical.com

LOGIN COMMENTS:

SAMPLE TEMP RECEIVED AT:

Monrovia
 Compliance Acceptance Criteria: (Chemistry: 4 ± 2 °C) (Microbiology: < 10°C)

(Other) IR Gun ID = 616
 IR Gun ID = 616

(Observation = 7.8 °C) (Corr. Factor = 0.12 °C) (Final = 7.6 °C)
 (Observation = 7.8 °C) (Corr. Factor = 0.12 °C) (Final = 7.6 °C)

SAMPLES REC'D DAY OF COLLECTION? (check for yes)

SAMPLES CHECKED AGAINST COC BY: CB

SAMPLES LOGGED IN BY: CB

TYPE OF ICE: Real Synthetic

No Ice

CONDITION OF ICE: Frozen Partially Frozen

Thawed

N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other:

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME: GSI Environmental

PROJECT CODE: WED Pilot

(check for yes)

COMPLIANCE SAMPLES

NON-COMPLIANCE SAMPLES

(check for yes)

REGULATION INVOLVED:

- Requires state forms

(eg. SDWA, NPDES, etc.)

Type of samples (circle one): ROUTINE SPECIAL CONFIRMATION

SEE ATTACHED KIT ORDER FOR ANALYSES (check for yes), OR

EEA CLIENT CODE: COC ID:

SAMPLE GROUP:

TAT requested: rush by adv notice only

STD ___ 1 wk ___ 3 day ___ 2 day ___ 1 day ___

SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX	FIELD DATA	FIELD DATA	COMPLIANCE SAMPLES	NON-COMPLIANCE SAMPLES	SAMPLER COMMENTS
12-4	1230	GAC-5-20201204		Water			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		1233					<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		1236					<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		1239					<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		1242					<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		1245					<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		1248					<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		1251					<input checked="" type="checkbox"/>	<input type="checkbox"/>	

* MATRIX TYPES: RSW = Raw Surface Water
 RGW = Raw Ground Water
 CFW = Chlor(am)inated Finished Water
 FW = Other Finished Water

SEAW = Sea Water
 WW = Waste Water

BW = Bottled Water
 SW = Storm Water

SO = Soil
 SL = Sludge

SIGNATURE

PRINT NAME

DATE

TIME

SAMPLED BY: <u>CB</u>	COMPANY/TITLE: <u>GSI</u>	DATE: <u>12-4-20</u>	TIME: <u>1322</u>
RELINQUISHED BY: <u>Robert Torres</u>		DATE: <u>12-4-2020</u>	TIME: <u>1322</u>
RECEIVED BY: <u>Robert Torres</u>		DATE: <u>12-4-20</u>	TIME: <u>1322</u>
RELINQUISHED BY: <u>Chris Bracher</u>			
RECEIVED BY:			

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 906889
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202012040193 <u>IX-1-20201204</u>						
12/07/2020 23:01	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
12/07/2020 23:01	Perfluorooctanoic acid (PFOA)		0.0031		ug/L	0.0020
202012040194 <u>IX-2-20201204</u>						
12/07/2020 23:10	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
202012040195 <u>IX-3-20201204</u>						
12/07/2020 23:20	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
12/07/2020 23:20	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
12/07/2020 23:20	Perfluorooctanoic acid (PFOA)		0.0025		ug/L	0.0020
202012040196 <u>IX-4-20201204</u>						
12/07/2020 23:29	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
202012040197 <u>GAC-5-20201204</u>						
12/07/2020 23:49	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
12/07/2020 23:49	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
12/07/2020 23:49	Perfluorohexanesulfonic acid (PFHxS)		0.0024		ug/L	0.0020
12/07/2020 23:49	Perfluorohexanoic acid (PFHxA)		0.0074		ug/L	0.0020
12/07/2020 23:49	Perfluorooctanesulfonic acid (PFOS)		0.0051		ug/L	0.0020
12/07/2020 23:49	Perfluorooctanoic acid (PFOA)		0.0084		ug/L	0.0020
202012040198 <u>GAC-6-20201204</u>						
12/07/2020 23:58	Perfluorobutanesulfonic acid (PFBS)		0.017		ug/L	0.0020
12/07/2020 23:58	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
12/07/2020 23:58	Perfluorohexanoic acid (PFHxA)		0.010		ug/L	0.0020
202012040201 <u>GAC-7-20201204</u>						
12/08/2020 00:08	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
12/08/2020 00:08	Perfluoroheptanoic acid (PFHpA)		0.0043		ug/L	0.0020
12/08/2020 00:08	Perfluorohexanesulfonic acid (PFHxS)		0.0034		ug/L	0.0020
12/08/2020 00:08	Perfluorohexanoic acid (PFHxA)		0.0081		ug/L	0.0020
12/08/2020 00:08	Perfluorooctanesulfonic acid (PFOS)		0.0033		ug/L	0.0020
12/08/2020 00:08	Perfluorooctanoic acid (PFOA)		0.0093		ug/L	0.0020
202012040202 <u>GAC-8-20201204</u>						
12/08/2020 00:17	Perfluorobutanesulfonic acid (PFBS)		0.0066		ug/L	0.0020
12/08/2020 00:17	Perfluorohexanoic acid (PFHxA)		0.0056		ug/L	0.0020
12/08/2020 00:17	Perfluorooctanoic acid (PFOA)		0.0028		ug/L	0.0020
202012040203 <u>IX-5-20201204</u>						

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
12/08/2020 03:48	Perfluorohexanoic acid (PFHxA)		0.0048		ug/L	0.0020
12/08/2020 03:48	Perfluorooctanoic acid (PFOA)		0.0022		ug/L	0.0020
		202012040204 IX-6-20201204				
12/08/2020 03:58	Perfluoroheptanoic acid (PFHpA)		0.0026		ug/L	0.0020
12/08/2020 03:58	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
		202012040205 IX-7-20201204				
12/08/2020 02:22	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
12/08/2020 02:22	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
12/08/2020 02:22	Perfluorooctanoic acid (PFOA)		0.0042		ug/L	0.0020
		202012040206 IX-8-20201204				
12/08/2020 02:41	Perfluoroheptanoic acid (PFHpA)		0.0036		ug/L	0.0020
12/08/2020 02:41	Perfluorohexanoic acid (PFHxA)		0.0074		ug/L	0.0020
12/08/2020 02:41	Perfluorooctanoic acid (PFOA)		0.0020		ug/L	0.0020

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20201204 (202012040189)					Sampled on 12/04/2020 1015				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	13C2-PFDA	104	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	13C2-PFHxA	107	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	99	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	91	%		1
12/05/20	12/07/20 22:41	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	106	%		1

GAC-2-20201204 (202012040190)					Sampled on 12/04/2020 1018				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	13C2-PFDA	100	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	13C2-PFHxA	105	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	94	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/05/20	12/07/20 22:51	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	103	%		1

GAC-3-20201204 (202012040191)

Sampled on 12/04/2020 1021

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	13C2-PFDA	102	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	13C2-PFHxA	103	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	92	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/05/20	12/07/20 21:44	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	108	%		1

GAC-4-20201204 (202012040192)

Sampled on 12/04/2020 1024

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	13C2-PFDA	100	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	13C2-PFHxA	106	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	95	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	92	%		1
12/05/20	12/07/20 22:03	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	108	%		1

IX-1-20201204 (202012040193)

Static ID: 537.1

Sampled on 12/04/2020 1027

EPA 537.1 - EPA Method 537.1

12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0031	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	13C2-PFDA	113	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	13C2-PFHxA	107	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	104	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	91	%		1
12/05/20	12/07/20 23:01	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-2-20201204 (202012040194)

Sampled on 12/04/2020 1030

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	13C2-PFDA	111	%		1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	13C2-PFHxA	110	%		1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	104	%		1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	95	%		1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 23:10	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	104	%		1
IX-3-20201204 (202012040195)						Sampled on 12/04/2020 1033			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0025	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	13C2-PFDA	112	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	13C2-PFHxA	107	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	104	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	92	%		1
12/05/20	12/07/20 23:20	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	106	%		1

IX-4-20201204 (202012040196)						Sampled on 12/04/2020 1036			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	13C2-PFDA	110	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	13C2-PFHxA	106	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	101	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	93	%		1
12/05/20	12/07/20 23:29	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	107	%		1

GAC-5-20201204 (202012040197)

Sampled on 12/04/2020 1230

EPA 537.1 - EPA Method 537.1

12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0024	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0074	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0051	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0084	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	13C2-PFDA	105	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	13C2-PFHxA	104	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	96	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	97	%		1
12/05/20	12/07/20 23:49	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	105	%		1

GAC-6-20201204 (202012040198)

Sampled on 12/04/2020 1233

EPA 537.1 - EPA Method 537.1

12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.017	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.010	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	13C2-PFDA	107	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	13C2-PFHxA	106	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	101	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	94	%		1
12/05/20	12/07/20 23:58	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	105	%		1

GAC-7-20201204 (202012040201)

Sampled on 12/04/2020 1236

EPA 537.1 - EPA Method 537.1

12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0043	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0034	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0081	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0033	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0093	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	13C2-PFDA	107	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	13C2-PFHxA	107	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	101	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	92	%		1
12/05/20	12/08/20 00:08	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	110	%		1

GAC-8-20201204 (202012040202)

Sampled on 12/04/2020 1239

EPA 537.1 - EPA Method 537.1

12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0066	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0056	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0028	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	13C2-PFDA	111	%		1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	13C2-PFHxA	112	%		1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	13C3-HFPO-DA	100	%		1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	d3-NMeFOSAA	93	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/05/20	12/08/20 00:17	1292359	1292720	(EPA 537.1)	d5-NEtFOSAA	105	%		1

IX-5-20201204 (202012040203)

Sampled on 12/04/2020 1242

EPA 537.1 - EPA Method 537.1

12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0048	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0022	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	13C2-PFDA	108	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	13C2-PFHxA	105	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	13C3-HFPO-DA	101	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	d3-NMeFOSAA	94	%		1
12/06/20	12/08/20 03:48	1292440	1292727	(EPA 537.1)	d5-NEtFOSAA	108	%		1

IX-6-20201204 (202012040204)

Sampled on 12/04/2020 1245

EPA 537.1 - EPA Method 537.1

12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0026	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	13C2-PFDA	107	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	13C2-PFHxA	101	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	13C3-HFPO-DA	100	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	13C4-PFOS- IS#2	90	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	d3-NMeFOSAA	96	%		1
12/06/20	12/08/20 03:58	1292440	1292727	(EPA 537.1)	d5-NEtFOSAA	107	%		1

IX-7-20201204 (202012040205)

Sampled on 12/04/2020 1248

EPA 537.1 - EPA Method 537.1

12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0042	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	13C2-PFDA	104	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	13C2-PFHxA	100	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	13C3-HFPO-DA	96	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	13C4-PFOS- IS#2	92	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/06/20	12/08/20 02:22	1292440	1292727	(EPA 537.1)	d5-NEtFOSAA	102	%		1

IX-8-20201204 (202012040206)

Sampled on 12/04/2020 1251

EPA 537.1 - EPA Method 537.1

12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0036	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0074	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 906889
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/04/2020 1322

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0020	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	13C2-PFDA	117	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	13C2-PFHxA	110	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	13C3-HFPO-DA	108	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/06/20	12/08/20 02:41	1292440	1292727	(EPA 537.1)	d5-NEtFOSAA	103	%		1

Rounding on totals after summation.
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Report: 906889
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

EPA Method 537.1

Prep Batch: 1292359 Analytical Batch: 1292720

202012040189	GAC-1-20201204
202012040190	GAC-2-20201204
202012040191	GAC-3-20201204
202012040192	GAC-4-20201204
202012040193	IX-1-20201204
202012040194	IX-2-20201204
202012040195	IX-3-20201204
202012040196	IX-4-20201204
202012040197	GAC-5-20201204
202012040198	GAC-6-20201204
202012040201	GAC-7-20201204
202012040202	GAC-8-20201204

Analysis Date: 12/07/2020

Analyzed by: SZZ
Analyzed by: SZZ
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EPA Method 537.1

Prep Batch: 1292440 Analytical Batch: 1292727

202012040203	IX-5-20201204
202012040204	IX-6-20201204
202012040205	IX-7-20201204
202012040206	IX-8-20201204

Analysis Date: 12/08/2020

Analyzed by: SZZ
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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1292359 Analytical Batch: 1292720					Analysis Date: 12/07/2020				
DUP_202012040192	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0490	ug/L	104	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0475	ug/L	101	(70-130)	30	3.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS2_202012040191	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0473	ug/L	100	(70-130)		
DUP_202012040192	13C2-PFDA (S)			94.4	%	94	(70-130)		
LCS3	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFDA (S)		100	109	%	109	(70-130)		
MBLK	13C2-PFDA (S)			104	%	104	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	104	%	104	(70-130)		
MS2_202012040191	13C2-PFDA (S)		100	102	%	102	(70-130)		
DUP_202012040192	13C2-PFHxA (S)			102	%	102	(70-130)		
LCS3	13C2-PFHxA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MBLK	13C2-PFHxA (S)			110	%	110	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	115	%	115	(70-130)		
MS2_202012040191	13C2-PFHxA (S)		100	109	%	109	(70-130)		
DUP_202012040192	13C2-PFOA- IS#1 (I)			111	%	111	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	97.8	%	98	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	97.1	%	97	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	98.0	%	98	(50-150)		
MS2_202012040191	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
DUP_202012040192	13C3-HFPO-DA (S)			92.1	%	92	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MBLK	13C3-HFPO-DA (S)			100	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
MS2_202012040191	13C3-HFPO-DA (S)		100	98.7	%	99	(70-130)		
DUP_202012040192	13C4-PFOS- IS#2 (I)			94.6	%	95	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	92.5	%	93	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	93.9	%	94	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			95.4	%	95	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	93.4	%	93	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202012040191	13C4-PFOS- IS#2 (I)		100	91.7	%	92	(50-150)		
DUP_202012040192	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0514	ug/L	106	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0518	ug/L	107	(70-130)	30	0.78
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00214	ug/L	113	(50-150)		
MS2_202012040191	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0492	ug/L	101	(70-130)		
DUP_202012040192	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0501	ug/L	108	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0503	ug/L	108	(70-130)	30	0.40
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00207	ug/L	111	(50-150)		
MS2_202012040191	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0495	ug/L	106	(70-130)		
DUP_202012040192	d3-NMeFOSAA (I)			91.1	%	91	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	94.4	%	94	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	93.4	%	93	(50-150)		
MBLK	d3-NMeFOSAA (I)			94.3	%	94	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	95.0	%	95	(50-150)		
MS2_202012040191	d3-NMeFOSAA (I)		100	94.9	%	95	(50-150)		
DUP_202012040192	d5-NEtFOSAA (S)			107	%	107	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
MBLK	d5-NEtFOSAA (S)			103	%	103	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MS2_202012040191	d5-NEtFOSAA (S)		100	98.0	%	98	(70-130)		
DUP_202012040192	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0521	ug/L	104	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0517	ug/L	103	(70-130)	30	0.77
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00215	ug/L	108	(50-150)		
MS2_202012040191	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0488	ug/L	98	(70-130)		
DUP_202012040192	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0509	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0518	ug/L	104	(70-130)	30	1.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS2_202012040191	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0508	ug/L	101	(70-130)		
DUP_202012040192	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0517	ug/L	103	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0533	ug/L	107	(70-130)	30	3.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00221	ug/L	111	(50-150)		
MS2_202012040191	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0507	ug/L	101	(70-130)		
DUP_202012040192	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0500	ug/L	113	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0492	ug/L	111	(70-130)	30	1.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00205	ug/L	116	(50-150)		
MS2_202012040191	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0503	ug/L	113	(70-130)		
DUP_202012040192	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0547	ug/L	109	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0545	ug/L	109	(70-130)	30	0.37
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00221	ug/L	110	(50-150)		
MS2_202012040191	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0508	ug/L	102	(70-130)		
DUP_202012040192	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0555	ug/L	111	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0561	ug/L	112	(70-130)	30	1.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00222	ug/L	111	(50-150)		
MS2_202012040191	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0517	ug/L	103	(70-130)		
DUP_202012040192	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0552	ug/L	110	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0560	ug/L	112	(70-130)	30	1.4
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00245	ug/L	123	(50-150)		
MS2_202012040191	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0527	ug/L	105	(70-130)		
DUP_202012040192	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0517	ug/L	113	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0504	ug/L	111	(70-130)	30	2.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00222	ug/L	122	(50-150)		
MS2_202012040191	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0517	ug/L	113	(70-130)		
DUP_202012040192	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0562	ug/L	112	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0554	ug/L	111	(70-130)	30	1.4

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00249	ug/L	124	(50-150)		
MS2_202012040191	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0530	ug/L	106	(70-130)		
DUP_202012040192	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0568	ug/L	114	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0569	ug/L	114	(70-130)	30	0.18
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00240	ug/L	120	(50-150)		
MS2_202012040191	Perfluorononanoic acid (PFNA)	ND	0.05	0.0540	ug/L	108	(70-130)		
DUP_202012040192	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0516	ug/L	111	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0513	ug/L	111	(70-130)	30	0.58
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00218	ug/L	118	(50-150)		
MS2_202012040191	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0514	ug/L	111	(70-130)		
DUP_202012040192	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0548	ug/L	110	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0543	ug/L	109	(70-130)	30	0.92
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00243	ug/L	122	(50-150)		
MS2_202012040191	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0530	ug/L	106	(70-130)		
DUP_202012040192	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0550	ug/L	110	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0549	ug/L	110	(70-130)	30	0.18
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00240	ug/L	120	(50-150)		
MS2_202012040191	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0497	ug/L	99	(70-130)		
DUP_202012040192	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0503	ug/L	101	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0501	ug/L	100	(70-130)	30	0.40
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00195	ug/L	98	(50-150)		
MS2_202012040191	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0446	ug/L	89	(70-130)		
DUP_202012040192	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0524	ug/L	105	(70-130)	30	2.5
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00208	ug/L	104	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202012040191	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0489	ug/L	98	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1292440 Analytical Batch: 1292727

Analysis Date: 12/08/2020

DUP_202012040206	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0225	ug/L	96	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0251	ug/L	107	(70-130)	30	11
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00206	ug/L	110	(50-150)		
MS1_202012040205	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0250	ug/L	106	(70-130)		
DUP_202012040206	13C2-PFDA (S)			115	%	115	(70-130)		
LCS1	13C2-PFDA (S)		100	106	%	106	(70-130)		
LCS2	13C2-PFDA (S)		100	114	%	114	(70-130)		
MBLK	13C2-PFDA (S)			112	%	112	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	108	%	108	(70-130)		
MS1_202012040205	13C2-PFDA (S)		100	104	%	104	(70-130)		
DUP_202012040206	13C2-PFHxA (S)			108	%	108	(70-130)		
LCS1	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS2	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	115	%	115	(70-130)		
MS1_202012040205	13C2-PFHxA (S)		100	98.7	%	99	(70-130)		
DUP_202012040206	13C2-PFOA- IS#1 (I)			92.4	%	92	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	96.5	%	97	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	96.7	%	97	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			95.6	%	96	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	98.8	%	99	(50-150)		
MS1_202012040205	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202012040206	13C3-HFPO-DA (S)			106	%	107	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
MBLK	13C3-HFPO-DA (S)			106	%	106	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MS1_202012040205	13C3-HFPO-DA (S)		100	95.6	%	96	(70-130)		
DUP_202012040206	13C4-PFOS- IS#2 (I)			92.4	%	92	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	92.4	%	92	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	91.1	%	91	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			93.2	%	93	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	13C4-PFOS- IS#2 (I)		100	91.6	%	92	(50-150)		
MS1_202012040205	13C4-PFOS- IS#2 (I)		100	91.0	%	91	(50-150)		
DUP_202012040206	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0247	ug/L	104	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0268	ug/L	113	(70-130)	30	8.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00222	ug/L	118	(50-150)		
MS1_202012040205	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0246	ug/L	104	(70-130)		
DUP_202012040206	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0234	ug/L	100	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0263	ug/L	113	(70-130)	30	12
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00209	ug/L	112	(50-150)		
MS1_202012040205	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0266	ug/L	114	(70-130)		
DUP_202012040206	d3-NMeFOSAA (I)			92.9	%	93	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	93.0	%	93	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	94.8	%	95	(50-150)		
MBLK	d3-NMeFOSAA (I)			92.6	%	93	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	94.9	%	95	(50-150)		
MS1_202012040205	d3-NMeFOSAA (I)		100	92.1	%	92	(50-150)		
DUP_202012040206	d5-NEtFOSAA (S)			103	%	103	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MBLK	d5-NEtFOSAA (S)			106	%	106	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MS1_202012040205	d5-NEtFOSAA (S)		100	108	%	109	(70-130)		
DUP_202012040206	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0243	ug/L	97	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0266	ug/L	106	(70-130)	30	9.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00221	ug/L	111	(50-150)		
MS1_202012040205	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0254	ug/L	101	(70-130)		
DUP_202012040206	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0250	ug/L	100	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)	30	7.3
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00226	ug/L	113	(50-150)		
MS1_202012040205	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0278	ug/L	111	(70-130)		

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 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202012040206	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0248	ug/L	99	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)	30	10
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00229	ug/L	114	(50-150)		
MS1_202012040205	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0274	ug/L	109	(70-130)		
DUP_202012040206	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0236	ug/L	107	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0257	ug/L	116	(70-130)	30	8.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00200	ug/L	113	(50-150)		
MS1_202012040205	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0244	ug/L	109	(70-130)		
DUP_202012040206	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0259	ug/L	104	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0285	ug/L	114	(70-130)	30	9.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00222	ug/L	111	(50-150)		
MS1_202012040205	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0266	ug/L	106	(70-130)		
DUP_202012040206	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0290	ug/L	116	(70-130)	30	10
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00228	ug/L	114	(50-150)		
MS1_202012040205	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0272	ug/L	108	(70-130)		
DUP_202012040206	Perfluoroheptanoic acid (PFHpA)	0.0036		0.00344	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0291	ug/L	116	(70-130)	30	9.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00239	ug/L	120	(50-150)		
MS1_202012040205	Perfluoroheptanoic acid (PFHpA)	0.0041	0.025	0.0298	ug/L	103	(70-130)		
DUP_202012040206	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0244	ug/L	107	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0266	ug/L	117	(70-130)	30	8.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00224	ug/L	123	(50-150)		
MS1_202012040205	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0266	ug/L	117	(70-130)		
DUP_202012040206	Perfluorohexanoic acid (PFHxA)	0.0074		0.00739	ug/L		(0-30)	30	0.23
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0268	ug/L	107	(70-130)		

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Report: 906889
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0279	ug/L	112	(70-130)	30	4.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00237	ug/L	118	(50-150)		
MS1_202012040205	Perfluorohexanoic acid (PFHxA)	0.0068	0.025	0.0317	ug/L	99	(70-130)		
DUP_202012040206	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0289	ug/L	115	(70-130)	30	8.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00237	ug/L	119	(50-150)		
MS1_202012040205	Perfluorononanoic acid (PFNA)	ND	0.025	0.0275	ug/L	109	(70-130)		
DUP_202012040206	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0239	ug/L	103	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0270	ug/L	117	(70-130)	30	12
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00218	ug/L	118	(50-150)		
MS1_202012040205	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0268	ug/L	116	(70-130)		
DUP_202012040206	Perfluorooctanoic acid (PFOA)	0.0020		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0280	ug/L	112	(70-130)	30	5.5
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00235	ug/L	117	(50-150)		
MS1_202012040205	Perfluorooctanoic acid (PFOA)	0.0042	0.025	0.0317	ug/L	110	(70-130)		
DUP_202012040206	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0287	ug/L	115	(70-130)	30	6.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00248	ug/L	124	(50-150)		
MS1_202012040205	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0274	ug/L	108	(70-130)		
DUP_202012040206	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0230	ug/L	92	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0252	ug/L	101	(70-130)	30	9.1
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00203	ug/L	102	(50-150)		
MS1_202012040205	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0236	ug/L	94	(70-130)		
DUP_202012040206	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0271	ug/L	109	(70-130)	30	11
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 906889
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202012040205	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0252	ug/L	101	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 12/08/2020

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 12/08/2020

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 12/08/2020

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Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), Presence/Absence (P/A)* (Total Coliform, E. Coli)

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 12/08/2020

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Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 909215
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 909215
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **December 17, 2020 at 1445**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202012170402</u>	IX-5-20201217 Static ID: 537.1 @537.1	12/17/2020 1133
<u>202012170403</u>	IX-6-20201217 Static ID: 537.1 @537.1	12/17/2020 1136
<u>202012170404</u>	IX-7-20201217 Static ID: 537.1 @537.1	12/17/2020 1139
<u>202012170405</u>	IX-8-20201217 Static ID: 537.1 @537.1	12/17/2020 1142
<u>202012170406</u>	GAC-5-20201217 @537.1	12/17/2020 1145
<u>202012170407</u>	GAC-6-20201217 @537.1	12/17/2020 1148
<u>202012170408</u>	GAC-7-20201217 @537.1	12/17/2020 1151
<u>202012170409</u>	GAC-8-20201217 @537.1	12/17/2020 1154
<u>202012170410</u>	IX-5M-20201217 @537.1	12/17/2020 1157
<u>202012170411</u>	IX-6M-20201217 @537.1	12/17/2020 1200
<u>202012170412</u>	IX-7M-20201217 @537.1	12/17/2020 1203
<u>202012170413</u>	IX-8M-20201217 @537.1	12/17/2020 1206
<u>202012170414</u>	GAC-5M-20201217	12/17/2020 1209

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 909215
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **December 17, 2020 at 1445**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202012170415	GAC-6M-20201217	12/17/2020 1212
	@537.1	
202012170416	GAC-7M-20201217	12/17/2020 1215
	@537.1	
202012170417	GAC-8M-20201217	12/17/2020 1218
	@537.1	
202012170418	MB-INF-20201217	12/17/2020 1221
	@ICP	Total Hardness as CaCO3 by ICP
	Uranium by ICPMS as pCi/L	@537.1
	@VOASDWA	Alkalinity in CaCO3 units
	Calcium Total ICAP	Chloride
	Iron Total ICAP	Magnesium Total ICAP
	Oil and Grease by 1664(subbed)	Perchlorate
	Sodium Total ICAP	Sulfate
	Total Organic Carbon	Total Suspended Solids (TSS)
	@ICPMS	
	@ANIONS48	
		Arsenic Total ICAP/MS
		Hexavalent chromium(Dissolved)
		Manganese Total ICAP/MS
		Potassium Total ICAP
		Total Dissolved Solid (TDS)

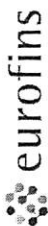
Test Description

- @ICP -- ICP Metals
- @ICPMS -- ICPMS Metals
- @537.1 -- EPA Method 537.1
- @ANIONS48 -- Nitrate, Nitrite by EPA 300.0
- @VOASDWA -- Volatile Organics by GCMS



909245

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:						
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) PDT						
LABORATORY: Eurofins Eaton Analytical		REQUESTED ANALYSES Please check box or fill in blank as needed.						
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		PFAS - full list (EPA 537.1) <input type="checkbox"/> X Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) <input type="checkbox"/> X Alkalinity (as CaCO3), (SM 2320B) <input type="checkbox"/> X Uranium, Arsenic, Manganese (EPA 200.8) <input type="checkbox"/> X Perchlorate (EPA 314.0) <input type="checkbox"/> X Hexavalent Chromium (EPA 218.6) <input type="checkbox"/> X Fe, Na, K, Ca, Mg (EPA 200.7) <input type="checkbox"/> X Total Hardness as CaCO3 (SM 2340B) <input type="checkbox"/> X VOCs (EPA 524.2) <input type="checkbox"/> X TOC (SM 5310C) <input type="checkbox"/> X TDS (E160.1/SM 2540C) <input type="checkbox"/> X TSS (SM 2540D) <input type="checkbox"/> X Oil & Grease (EPA 1664) <input type="checkbox"/> X						
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results		Field Filtered <input type="checkbox"/> Preserved <input type="checkbox"/> Unpreserved <input type="checkbox"/>						
LAB USE ONLY	SAMPLE ID	DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Field Filtered	Preserved	Unpreserved
	IX-5-2020- 1217 1217	12/17/2020	1133	Water	2			
	IX-6-2020- 1217 1217	12/17/2020	1136	Water	1			
	IX-7-2020- 1217 1217	12/17/2020	1139	Water	1			
	IX-8-2020- 1217 1217	12/17/2020	1142	Water	1			
	GAC-5-2020- 1217 1217	12/17/2020	1145	Water	1			
	GAC-6-2020- 1217 1217	12/17/2020	1148	Water	1			
	GAC-7-2020- 1217 1217	12/17/2020	1151	Water	1			
	GAC-8-2020- 1217 1217	12/17/2020	1154	Water	1			
	IX-5M-2020- 1217 1217	12/17/2020	1157	Water	1			
	IX-6M-2020- 1217 1217	12/17/2020	1200	Water	1			
	IX-7M-2020- 1217 1217	12/17/2020	1203	Water	1			
	IX-8M-2020- 1217 1217	12/17/2020	1206	Water	1			
	GAC-5M-2020- 1217 1217	12/17/2020	1209	Water	1			
	GAC-6M-2020- 1217 1217	12/17/2020	1212	Water	1			
	GAC-7M-2020- 1217 1217	12/17/2020	1215	Water	1			
	GAC-8M-2020- 1217 1217	12/17/2020	1218	Water	1			
	MB-INF-2020- 1217 1217	12/17/2020	1221	Water	13			
Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>		Date: <u>12-17-2020</u>		Time: <u>1445</u>		
Relinquished by: (Signature)		Received by: (Signature) <i>[Signature]</i>		Date: <u>12-17-2020</u>		Time: <u>1445</u>		
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:		



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 908215

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 6016 (Observation = 17.1 °C) (Corr. Factor = -0.12 °C) (Final = 16.9 °C)

TYPE OF ICE: Real Synthetic No Ice Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA and Radon Headspace:



No Samples with Headspace:

Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
<u>Chuck Brooker</u>	<u>Chuck Brooker</u>	Chuck Brooker	Eurofins Eaton Analytical	12-17-20	1445

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 909215
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944 exp 9-30-2021

Flags Legend:

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

R7 - LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202012170402 <u>IX-5-20201217</u>						
12/22/2020 23:08	Perfluorohexanoic acid (PFHxA)		0.0057		ug/L	0.0020
12/22/2020 23:08	Perfluorooctanoic acid (PFOA)		0.0028		ug/L	0.0020
202012170403 <u>IX-6-20201217</u>						
12/22/2020 23:18	Perfluoroheptanoic acid (PFHpA)		0.0030		ug/L	0.0020
12/22/2020 23:18	Perfluorohexanoic acid (PFHxA)		0.0069		ug/L	0.0020
202012170404 <u>IX-7-20201217</u>						
12/22/2020 23:27	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
12/22/2020 23:27	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
12/22/2020 23:27	Perfluorooctanoic acid (PFOA)		0.0050		ug/L	0.0020
202012170405 <u>IX-8-20201217</u>						
12/22/2020 22:20	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
12/22/2020 22:20	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
12/22/2020 22:20	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
202012170406 <u>GAC-5-20201217</u>						
12/22/2020 22:39	Perfluorobutanesulfonic acid (PFBS)		0.0098		ug/L	0.0020
12/22/2020 22:39	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
12/22/2020 22:39	Perfluorohexanesulfonic acid (PFHxS)		0.0028		ug/L	0.0020
12/22/2020 22:39	Perfluorohexanoic acid (PFHxA)		0.0079		ug/L	0.0020
12/22/2020 22:39	Perfluorooctanesulfonic acid (PFOS)		0.0072		ug/L	0.0020
12/22/2020 22:39	Perfluorooctanoic acid (PFOA)		0.0099		ug/L	0.0020
202012170407 <u>GAC-6-20201217</u>						
12/23/2020 03:27	Perfluorobutanesulfonic acid (PFBS)		0.016		ug/L	0.0020
12/23/2020 03:27	Perfluoroheptanoic acid (PFHpA)		0.0048		ug/L	0.0020
12/23/2020 03:27	Perfluorohexanoic acid (PFHxA)		0.0099		ug/L	0.0020
12/23/2020 03:27	Perfluorooctanoic acid (PFOA)		0.0024		ug/L	0.0020
202012170408 <u>GAC-7-20201217</u>						
12/23/2020 03:36	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
12/23/2020 03:36	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
12/23/2020 03:36	Perfluorohexanesulfonic acid (PFHxS)		0.0040		ug/L	0.0020
12/23/2020 03:36	Perfluorohexanoic acid (PFHxA)		0.0089		ug/L	0.0020
12/23/2020 03:36	Perfluorooctanesulfonic acid (PFOS)		0.0050		ug/L	0.0020
12/23/2020 03:36	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
202012170409 <u>GAC-8-20201217</u>						

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
12/22/2020 23:37	Perfluorobutanesulfonic acid (PFBS)		0.0072		ug/L	0.0020
12/22/2020 23:37	Perfluoroheptanoic acid (PFHpA)		0.0023		ug/L	0.0020
12/22/2020 23:37	Perfluorohexanoic acid (PFHxA)		0.0062		ug/L	0.0020
12/22/2020 23:37	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
		202012170410 IX-5M-20201217				
12/22/2020 23:46	Perfluorobutanesulfonic acid (PFBS)		0.0024		ug/L	0.0020
12/22/2020 23:46	Perfluoroheptanoic acid (PFHpA)		0.0038		ug/L	0.0020
12/22/2020 23:46	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
12/22/2020 23:46	Perfluorooctanesulfonic acid (PFOS)		0.0038		ug/L	0.0020
12/22/2020 23:46	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
		202012170411 IX-6M-20201217				
12/22/2020 23:56	Perfluorobutanesulfonic acid (PFBS)		0.0022		ug/L	0.0020
12/22/2020 23:56	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
12/22/2020 23:56	Perfluorohexanoic acid (PFHxA)		0.0051		ug/L	0.0020
12/22/2020 23:56	Perfluorooctanoic acid (PFOA)		0.0083		ug/L	0.0020
		202012170412 IX-7M-20201217				
12/23/2020 00:05	Perfluorobutanesulfonic acid (PFBS)		0.0054		ug/L	0.0020
12/23/2020 00:05	Perfluoroheptanoic acid (PFHpA)		0.0046		ug/L	0.0020
12/23/2020 00:05	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
12/23/2020 00:05	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
12/23/2020 00:05	Perfluorooctanesulfonic acid (PFOS)		0.0025		ug/L	0.0020
12/23/2020 00:05	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
		202012170413 IX-8M-20201217				
12/23/2020 00:25	Perfluorobutanesulfonic acid (PFBS)		0.0040		ug/L	0.0020
12/23/2020 00:25	Perfluoroheptanoic acid (PFHpA)		0.0046		ug/L	0.0020
12/23/2020 00:25	Perfluorohexanoic acid (PFHxA)		0.0073		ug/L	0.0020
12/23/2020 00:25	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
12/23/2020 00:25	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
		202012170414 GAC-5M-20201217				
12/23/2020 00:34	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
12/23/2020 00:34	Perfluoroheptanoic acid (PFHpA)		0.0050		ug/L	0.0020
12/23/2020 00:34	Perfluorohexanesulfonic acid (PFHxS)		0.0053		ug/L	0.0020
12/23/2020 00:34	Perfluorohexanoic acid (PFHxA)		0.0086		ug/L	0.0020
12/23/2020 00:34	Perfluorononanoic acid (PFNA)		0.0028		ug/L	0.0020
12/23/2020 00:34	Perfluorooctanesulfonic acid (PFOS)		0.021		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
12/23/2020 00:34	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
	202012170415	<u>GAC-6M-20201217</u>				
12/23/2020 00:44	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
12/23/2020 00:44	Perfluoroheptanoic acid (PFHpA)		0.0049		ug/L	0.0020
12/23/2020 00:44	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
12/23/2020 00:44	Perfluorohexanoic acid (PFHxA)		0.0077		ug/L	0.0020
12/23/2020 00:44	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
12/23/2020 00:44	Perfluorooctanesulfonic acid (PFOS)		0.014		ug/L	0.0020
12/23/2020 00:44	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
	202012170416	<u>GAC-7M-20201217</u>				
12/23/2020 00:53	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
12/23/2020 00:53	Perfluoroheptanoic acid (PFHpA)		0.0050		ug/L	0.0020
12/23/2020 00:53	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
12/23/2020 00:53	Perfluorohexanoic acid (PFHxA)		0.0084		ug/L	0.0020
12/23/2020 00:53	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
12/23/2020 00:53	Perfluorooctanesulfonic acid (PFOS)		0.024		ug/L	0.0020
12/23/2020 00:53	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
	202012170417	<u>GAC-8M-20201217</u>				
12/23/2020 01:03	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
12/23/2020 01:03	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
12/23/2020 01:03	Perfluorohexanesulfonic acid (PFHxS)		0.0043		ug/L	0.0020
12/23/2020 01:03	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
12/23/2020 01:03	Perfluorononanoic acid (PFNA)		0.0022		ug/L	0.0020
12/23/2020 01:03	Perfluorooctanesulfonic acid (PFOS)		0.018		ug/L	0.0020
12/23/2020 01:03	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
	202012170418	<u>MB-INF-20201217</u>				
12/30/2020 17:45	Alkalinity in CaCO3 units		160		mg/L	2.0
12/22/2020 20:45	Arsenic Total ICAP/MS		1.2	10	ug/L	1.0
12/22/2020 11:16	Calcium Total ICAP		62		mg/L	1.0
12/17/2020 21:18	Chloride		49	250	mg/L	2.5
12/22/2020 13:07	Hexavalent chromium(Dissolved)		0.48		ug/L	0.020
12/22/2020 11:16	Magnesium Total ICAP		12		mg/L	0.10
12/17/2020 21:18	Nitrate as Nitrogen by IC		2.7	10	mg/L	0.50
12/17/2020 21:18	Nitrate as NO3 (calc)		12	45	mg/L	2.2
12/28/2020 10:49	Oil and Grease by 1664(subbed)		0.956		mg/L	0.96
12/23/2020 09:41	Perfluorobutanesulfonic acid (PFBS)		0.0095		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
12/23/2020 09:41	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
12/23/2020 09:41	Perfluoroheptanoic acid (PFHpA)		0.0049		ug/L	0.0020
12/23/2020 09:41	Perfluorohexanesulfonic acid (PFHxS)		0.0070		ug/L	0.0020
12/23/2020 09:41	Perfluorohexanoic acid (PFHxA)		0.0073		ug/L	0.0020
12/23/2020 09:41	Perfluorononanoic acid (PFNA)		0.0042		ug/L	0.0020
12/23/2020 09:41	Perfluorooctanesulfonic acid (PFOS)		0.039		ug/L	0.0020
12/23/2020 09:41	Perfluorooctanoic acid (PFOA)		0.017		ug/L	0.0020
12/22/2020 11:16	Potassium Total ICAP		3.8		mg/L	1.0
12/22/2020 11:16	Sodium Total ICAP		51		mg/L	1.0
12/17/2020 21:18	Sulfate		72	250	mg/L	2.5
12/22/2020 22:37	Total Dissolved Solids (TDS)		400	500	mg/L	10
12/22/2020 13:21	Total Hardness as CaCO3 by ICP (calc)		200		mg/L	3.0
12/17/2020 21:18	Total Nitrate, Nitrite-N, CALC		2.7		mg/L	0.10
01/12/2021 05:02	Total Organic Carbon		0.72		mg/L	0.20
12/21/2020 15:14	Uranium by ICPMS as pCi/L		1.3		pCi/L	0.70
12/22/2020 20:45	Uranium ICAP/MS		2.0	30	ug/L	1.0

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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
IX-5-20201217 (202012170402)					Sampled on 12/17/2020 1133				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0057	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0028	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	13C2-PFDA	110	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	13C2-PFHxA	103	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	94	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	103	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	93	%		1
12/18/20	12/22/20 23:08	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	101	%		1

IX-6-20201217 (202012170403)					Sampled on 12/17/2020 1136				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0030	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0069	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	13C2-PFDA	103	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	13C2-PFHxA	97	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	97	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	93	%		1
12/18/20	12/22/20 23:18	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	99	%		1

IX-7-20201217 (202012170404)

Static ID: 537.1

Sampled on 12/17/2020 1139

EPA 537.1 - EPA Method 537.1

12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0050	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	13C2-PFDA	96	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	13C2-PFHxA	96	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	94	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	90	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	98	%		1
12/18/20	12/22/20 23:27	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	99	%		1

IX-8-20201217 (202012170405)

Sampled on 12/17/2020 1142

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	13C2-PFDA	105	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	13C2-PFHxA	104	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	101	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	94	%		1
12/18/20	12/22/20 22:20	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	102	%		1

GAC-5-20201217 (202012170406)

Sampled on 12/17/2020 1145

EPA 537.1 - EPA Method 537.1

12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0098	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0028	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0079	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0072	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0099	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	13C2-PFDA	102	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	13C2-PFHxA	105	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	99	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	92	%		1
12/18/20	12/22/20 22:39	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	103	%		1

GAC-6-20201217 (202012170407)

Sampled on 12/17/2020 1148

EPA 537.1 - EPA Method 537.1

12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.016	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0048	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0099	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0024	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	13C2-PFDA	112	%		1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	13C2-PFHxA	113	%		1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	13C3-HFPO-DA	107	%		1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	d3-NMeFOSAA	108	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/20/20	12/23/20 03:27	1295306	1295815	(EPA 537.1)	d5-NEtFOSAA	107	%		1
GAC-7-20201217 (202012170408)					Sampled on 12/17/2020 1151				
EPA 537.1 - EPA Method 537.1									
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0040	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0089	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0050	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	13C2-PFDA	110	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	13C2-PFHxA	115	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	13C3-HFPO-DA	109	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	d3-NMeFOSAA	105	%		1
12/20/20	12/23/20 03:36	1295306	1295815	(EPA 537.1)	d5-NEtFOSAA	112	%		1

GAC-8-20201217 (202012170409)

Sampled on 12/17/2020 1154

EPA 537.1 - EPA Method 537.1

12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0072	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0062	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	13C2-PFDA	109	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	13C2-PFHxA	111	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	92	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	108	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	97	%		1
12/18/20	12/22/20 23:37	1295045	1295814	(EPA 537.1)	d5-NETFOSAA	97	%		1

IX-5M-20201217 (202012170410)

Sampled on 12/17/2020 1157

EPA 537.1 - EPA Method 537.1

12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0024	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0038	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	13C2-PFDA	110	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	13C2-PFHxA	112	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	109	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	99	%		1
12/18/20	12/22/20 23:46	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	97	%		1

IX-6M-20201217 (202012170411)

Sampled on 12/17/2020 1200

EPA 537.1 - EPA Method 537.1

12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0022	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0051	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0083	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	13C2-PFDA	114	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	13C2-PFHxA	114	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	88	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	110	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	91	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	92	%		1
12/18/20	12/22/20 23:56	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-7M-20201217 (202012170412)

Sampled on 12/17/2020 1203

EPA 537.1 - EPA Method 537.1

12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0054	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0046	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0025	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	13C2-PFDA	110	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	13C2-PFHxA	108	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	89	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	108	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	90	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/18/20	12/23/20 00:05	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	98	%		1

IX-8M-20201217 (202012170413)

Sampled on 12/17/2020 1206

EPA 537.1 - EPA Method 537.1

12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0040	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0046	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0073	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	13C2-PFDA	108	%		1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	13C2-PFHxA	107	%		1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	95	%		1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	107	%		1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	97	%		1

Rounding on totals after summation.
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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/23/20 00:25	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	97	%		1
GAC-5M-20201217 (202012170414)					Sampled on 12/17/2020 1209				
EPA 537.1 - EPA Method 537.1									
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0050	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0053	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0086	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0028	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.021	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	13C2-PFDA	115	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	13C2-PFHxA	113	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	89	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	112	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	95	%		1
12/18/20	12/23/20 00:34	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-6M-20201217 (202012170415)

Sampled on 12/17/2020 1212

EPA 537.1 - EPA Method 537.1

12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0049	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0077	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.014	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	13C2-PFDA	112	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	13C2-PFHxA	113	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	93	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	111	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	94	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	99	%		1
12/18/20	12/23/20 00:44	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	101	%		1

GAC-7M-20201217 (202012170416)

Sampled on 12/17/2020 1215

EPA 537.1 - EPA Method 537.1

12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0050	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0084	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.024	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	13C2-PFDA	108	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	13C2-PFHxA	114	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	90	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	110	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	89	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	98	%		1
12/18/20	12/23/20 00:53	1295045	1295814	(EPA 537.1)	d5-NEtFOSAA	99	%		1

GAC-8M-20201217 (202012170417)

Sampled on 12/17/2020 1218

EPA 537.1 - EPA Method 537.1

12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0043	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0022	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.018	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	13C2-PFDA	117	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	13C2-PFHxA	118	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	13C2-PFOA- IS#1	88	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	13C3-HFPO-DA	118	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	13C4-PFOS- IS#2	93	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	d3-NMeFOSAA	97	%		1
12/18/20	12/23/20 01:03	1295045	1295814	(EPA 537.1)	d5-NEFOSAA	102	%		1

MB-INF-20201217 (202012170418)

Sampled on 12/17/2020 1221

EPA 200.8 - ICPMS Metals

12/18/20	12/22/20 20:45	1295017	1295209	(EPA 200.8)	Arsenic Total ICAP/MS	1.2	ug/L	1.0	1
12/18/20	12/22/20 20:45	1295017	1295209	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
12/18/20	12/22/20 20:45	1295017	1295209	(EPA 200.8)	Uranium ICAP/MS	2.0	ug/L	1.0	1

EPA 200.7 - ICP Metals

12/18/20	12/22/20 11:16	1295017	1295535	(EPA 200.7)	Calcium Total ICAP	62	mg/L	1.0	1
12/18/20	12/22/20 11:16	1295017	1295535	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
12/18/20	12/22/20 11:16	1295017	1295535	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1
12/18/20	12/22/20 11:16	1295017	1295535	(EPA 200.7)	Potassium Total ICAP	3.8	mg/L	1.0	1
12/18/20	12/22/20 11:16	1295017	1295535	(EPA 200.7)	Sodium Total ICAP	51	mg/L	1.0	1

SM 5310C - Total Organic Carbon

01/12/21	05:02		1299085	(SM 5310C)	Total Organic Carbon	0.72	mg/L	0.20	1
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EPA 200.8 - Uranium by ICPMS as pCi/L

12/21/20	15:14			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.3 (c)	pCi/L	0.70	1
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SM 2340B - Total Hardness as CaCO3 by ICP

12/22/20	13:21			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	200 (c)	mg/L	3.0	1
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EPA 218.6 - Hexavalent chromium(Dissolved)

12/22/20	13:07		1295808	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.48	ug/L	0.020	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

12/17/20	21:18		1294982	(EPA 300.0)	Nitrate as Nitrogen by IC	2.7	mg/L	0.50	5
12/17/20	21:18		1294982	(EPA 300.0)	Nitrate as NO3 (calc)	12	mg/L	2.2	5
12/17/20	21:18		1294982	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5

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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	12/17/20 21:18		1294982	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.7	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	12/17/20 21:18		1294977	(EPA 300.0)	Chloride	49	mg/L	2.5	5
	12/17/20 21:18		1294977	(EPA 300.0)	Sulfate	72	mg/L	2.5	5
EPA 314.0 - Perchlorate									
	12/31/20 20:34	(1)	1297375	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0095	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0049	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0070	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0073	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0042	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.039	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.017	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	13C2-PFDA	100	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	13C2-PFHxA	104	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	13C2-PFOA- IS#1	97	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	13C3-HFPO-DA	104	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	d3-NMeFOSAA	104	%		1
12/21/20	12/23/20 09:41	1295349	1295820	(EPA 537.1)	d5-NEtFOSAA	103	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	12/28/20 10:49			(EPA 1664)	Oil and Grease by 1664(subbed)	0.956	mg/L	0.96	1

Rounding on totals after summation.
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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 524.2 - Volatile Organics by GCMS									
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2,3-Trichlorobenzene	ND (LM)	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Hexachlorobutadiene	ND (LM)	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	tert-Butyl Ethyl Ether	ND (R7)	ug/L	3.0	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	1,2-Dichloroethane-d4	104	%		1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	4-Bromofluorobenzene	99	%		1
12/21/20	12/21/20 14:13	1295541	1295542	(EPA 524.2)	Toluene-d8	96	%		1

SM 2320B - Alkalinity in CaCO3 units

Rounding on totals after summation.
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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 12/17/2020 1445

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	12/30/20 17:45		1296968	(SM 2320B)	Alkalinity in CaCO3 units	160	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
12/22/20	12/22/20 22:37	1295775	1295777	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	400	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	12/22/20 20:49		1295505	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

Rounding on totals after summation.
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Group: WRD Pilot [Set #2]

Water Replenishment District

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1294977

202012170418 MB-INF-20201217

Analysis Date: 12/17/2020

Analyzed by: A9QW

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1294982

202012170418 MB-INF-20201217

Analysis Date: 12/17/2020

Analyzed by: A9QW

ICPMS Metals

Prep Batch: 1295017 Analytical Batch: 1295209

202012170418 MB-INF-20201217

Analysis Date: 12/22/2020

Analyzed by: AZS

Total Suspended Solids (TSS)

Analytical Batch: 1295505

202012170418 MB-INF-20201217

Analysis Date: 12/22/2020

Analyzed by: TJ52

ICP Metals

Prep Batch: 1295017 Analytical Batch: 1295535

202012170418 MB-INF-20201217

Analysis Date: 12/22/2020

Analyzed by: NINA

Volatile Organics by GCMS

Prep Batch: 1295541 Analytical Batch: 1295542

202012170418 MB-INF-20201217

Analysis Date: 12/21/2020

Analyzed by: TR7W

Total Dissolved Solids (TDS)

Prep Batch: 1295775 Analytical Batch: 1295777

202012170418 MB-INF-20201217

Analysis Date: 12/22/2020

Analyzed by: TJ52

Hexavalent chromium(Dissolved)

Analytical Batch: 1295808

202012170418 MB-INF-20201217

Analysis Date: 12/22/2020

Analyzed by: TLH

EPA Method 537.1

Prep Batch: 1295045 Analytical Batch: 1295814

202012170402 IX-5-20201217
 202012170403 IX-6-20201217
 202012170404 IX-7-20201217
 202012170405 IX-8-20201217
 202012170406 GAC-5-20201217
 202012170409 GAC-8-20201217
 202012170410 IX-5M-20201217
 202012170411 IX-6M-20201217
 202012170412 IX-7M-20201217
 202012170413 IX-8M-20201217
 202012170414 GAC-5M-20201217
 202012170415 GAC-6M-20201217
 202012170416 GAC-7M-20201217
 202012170417 GAC-8M-20201217

Analysis Date: 12/22/2020

Analyzed by: SZZ

Analyzed by: SZZ

Analyzed by: SZZ

Analyzed by: SZZ

Analyzed by: SZZ

Analyzed by: SZZ

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Report: 909215
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

EPA Method 537.1

Prep Batch: 1295306 Analytical Batch: 1295815

202012170407 GAC-6-20201217
202012170408 GAC-7-20201217

Analysis Date: 12/23/2020

Analyzed by: SZZ
Analyzed by: SZZ

EPA Method 537.1

Prep Batch: 1295349 Analytical Batch: 1295820

202012170418 MB-INF-20201217

Analysis Date: 12/23/2020

Analyzed by: SZZ

Alkalinity in CaCO3 units

Analytical Batch: 1296968

202012170418 MB-INF-20201217

Analysis Date: 12/30/2020

Analyzed by: ZS6I

Perchlorate

Analytical Batch: 1297375

202012170418 MB-INF-20201217

Analysis Date: 12/31/2020

Analyzed by: H5VG

Total Organic Carbon

Analytical Batch: 1299085

202012170418 MB-INF-20201217

Analysis Date: 01/12/2021

Analyzed by: ZS6I

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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1294977					Analysis Date: 12/17/2020				
LCS1	Chloride		25	26.9	mg/L	108	(90-110)		
LCS2	Chloride		25	26.9	mg/L	108	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.473	mg/L	95	(50-150)		
MS_202012170293	Chloride	67	26	93.2	mg/L	105	(80-120)		
MSD_202012170293	Chloride	67	26	93.3	mg/L	105	(80-120)	20	0.10
LCS1	Sulfate		50	52.3	mg/L	105	(90-110)		
LCS2	Sulfate		50	52.3	mg/L	105	(90-110)	20	0.0
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.926	mg/L	93	(50-150)		
MRLLW	Sulfate		0.25	0.223	mg/L	89	(50-150)		
MS_202012170293	Sulfate	4.5	50	59.5	mg/L	110	(80-120)		
MSD_202012170293	Sulfate	4.5	50	60.1	mg/L	111	(80-120)	20	1.0
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1294982					Analysis Date: 12/17/2020				
LCS1	Nitrate as Nitrogen by IC		2.5	2.56	mg/L	103	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.56	mg/L	103	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0474	mg/L	95	(50-150)		
MS_202012170293	Nitrate as Nitrogen by IC	0.44	2.6	3.10	mg/L	106	(80-120)		
MSD_202012170293	Nitrate as Nitrogen by IC	0.44	2.6	3.13	mg/L	107	(80-120)	20	1.0
LCS1	Nitrite Nitrogen by IC		1	0.955	mg/L	96	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.955	mg/L	96	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0476	mg/L	95	(50-150)		
MS_202012170293	Nitrite Nitrogen by IC	ND	1	0.839	mg/L	84	(80-120)		
MSD_202012170293	Nitrite Nitrogen by IC	ND	1	0.849	mg/L	85	(80-120)	20	1.2
ICPMS Metals by EPA 200.8									
Analytical Batch: 1295209					Analysis Date: 12/22/2020				
LCS1	Arsenic Total ICAP/MS		50	49.9	ug/L	100	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.8	ug/L	98	(85-115)	20	2.2
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.916	ug/L	92	(50-150)		
MS_202012170226	Arsenic Total ICAP/MS	3.8	50	58.2	ug/L	109	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202012170198	Arsenic Total ICAP/MS	1.2	50	54.8	ug/L	107	(70-130)		
MSD_202012170226	Arsenic Total ICAP/MS	3.8	50	60.0	ug/L	112	(70-130)	20	3.0
MSD2_202012170198	Arsenic Total ICAP/MS	1.2	50	56.9	ug/L	111	(70-130)	20	3.8
LCS1	Manganese Total ICAP/MS		100	103	ug/L	103	(85-115)		
LCS2	Manganese Total ICAP/MS		100	101	ug/L	101	(85-115)	20	2.0
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.00	ug/L	100	(50-150)		
MS_202012170226	Manganese Total ICAP/MS	2.8	100	111	ug/L	108	(70-130)		
MS2_202012170198	Manganese Total ICAP/MS	2.9	100	109	ug/L	106	(70-130)		
MSD_202012170226	Manganese Total ICAP/MS	2.8	100	114	ug/L	111	(70-130)	20	2.7
MSD2_202012170198	Manganese Total ICAP/MS	2.9	100	114	ug/L	111	(70-130)	20	4.2
LCS1	Uranium ICAP/MS		50	52.2	ug/L	104	(85-115)		
LCS2	Uranium ICAP/MS		50	53.4	ug/L	107	(85-115)	20	2.3
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.955	ug/L	96	(50-150)		
MS_202012170226	Uranium ICAP/MS	5.4	50	65.6	ug/L	120	(70-130)		
MS2_202012170198	Uranium ICAP/MS	1.5	50	59.3	ug/L	115	(70-130)		
MSD_202012170226	Uranium ICAP/MS	5.4	50	67.0	ug/L	123	(70-130)	20	2.1
MSD2_202012170198	Uranium ICAP/MS	1.5	50	62.6	ug/L	122	(70-130)	20	5.5

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1295505

Analysis Date: 12/22/2020

DUP_202011110046	Total Suspended Solids (TSS)	300		274	mg/L		(0-10)	10	9.7
DUP_202011110076	Total Suspended Solids (TSS)	66		62.0	mg/L		(0-10)	10	6.3
LCS1	Total Suspended Solids (TSS)		175	172	mg/L	98	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	174	mg/L	99	(71-107)	20	1.2
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	10.0	mg/L	100	(50-150)		

ICP Metals by EPA 200.7

Analytical Batch: 1295535

Analysis Date: 12/22/2020

LCS1	Calcium Total ICAP		50	50.8	mg/L	102	(85-115)		
LCS2	Calcium Total ICAP		50	50.9	mg/L	102	(85-115)	20	0.0
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.00	mg/L	100	(50-150)		
MS_202012170229	Calcium Total ICAP	35	50	83.7	mg/L	97	(70-130)		
MS2_202012180352	Calcium Total ICAP	3.3	50	54.4	mg/L	102	(70-130)		
MSD_202012170229	Calcium Total ICAP	35	50	83.8	mg/L	98	(70-130)	20	0.11
MSD2_202012180352	Calcium Total ICAP	3.3	50	54.1	mg/L	102	(70-130)	20	0.56

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Iron Total ICAP		5	5.10	mg/L	102	(85-115)		
LCS2	Iron Total ICAP		5	5.10	mg/L	102	(85-115)	20	0.0
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0206	mg/L	103	(50-150)		
MS_202012170229	Iron Total ICAP	ND	5	5.11	mg/L	102	(70-130)		
MS2_202012180352	Iron Total ICAP	ND	5	5.11	mg/L	102	(70-130)		
MSD_202012170229	Iron Total ICAP	ND	5	5.12	mg/L	102	(70-130)	20	0.12
MSD2_202012180352	Iron Total ICAP	ND	5	5.10	mg/L	102	(70-130)	20	0.003 1
LCS1	Magnesium Total ICAP		20	20.2	mg/L	101	(85-115)		
LCS2	Magnesium Total ICAP		20	20.2	mg/L	101	(85-115)	20	0.0
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0951	mg/L	95	(50-150)		
MS_202012170229	Magnesium Total ICAP	12	20	32.3	mg/L	100	(70-130)		
MS2_202012180352	Magnesium Total ICAP	0.16	20	20.6	mg/L	102	(70-130)		
MSD_202012170229	Magnesium Total ICAP	12	20	32.3	mg/L	101	(70-130)	20	0.091
MSD2_202012180352	Magnesium Total ICAP	0.16	20	20.6	mg/L	102	(70-130)	20	0.22
LCS1	Potassium Total ICAP		20	20.0	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	20.0	mg/L	100	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.624	mg/L	62	(50-150)		
MS_202012170229	Potassium Total ICAP	1.2	20	22.3	mg/L	106	(70-130)		
MS2_202012180352	Potassium Total ICAP	ND	20	21.2	mg/L	105	(70-130)		
MSD_202012170229	Potassium Total ICAP	1.2	20	22.3	mg/L	106	(70-130)	20	0.087
MSD2_202012180352	Potassium Total ICAP	ND	20	21.1	mg/L	105	(70-130)	20	0.48
LCS1	Sodium Total ICAP		50	50.2	mg/L	100	(85-115)		
LCS2	Sodium Total ICAP		50	50.5	mg/L	101	(85-115)	20	0.60
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	0.945	mg/L	95	(50-150)		
MS_202012170229	Sodium Total ICAP	9.9	50	58.7	mg/L	98	(70-130)		
MS2_202012180352	Sodium Total ICAP	3.6	50	53.0	mg/L	99	(70-130)		
MSD_202012170229	Sodium Total ICAP	9.9	50	58.8	mg/L	98	(70-130)	20	0.10
MSD2_202012180352	Sodium Total ICAP	3.6	50	53.0	mg/L	99	(70-130)	20	0.014

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1295542

Analysis Date: 12/21/2020

LCS1	1,1,1,2-Tetrachloroethane		5	4.56	ug/L	91	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.66	ug/L	93	(70-130)	20	2.2
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.68	ug/L	94	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.63	ug/L	93	(70-130)	20	1.1
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.00	ug/L	100	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.29	ug/L	106	(70-130)	20	5.6
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.78	ug/L	96	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.03	ug/L	101	(70-130)	20	5.1
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,1-Dichloroethane		5	4.72	ug/L	94	(70-130)		
LCS2	1,1-Dichloroethane		5	4.91	ug/L	98	(70-130)	20	4.0
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.02	ug/L	100	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.12	ug/L	102	(70-130)	20	2.0
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,1-Dichloropropene		5	4.83	ug/L	97	(70-130)		
LCS2	1,1-Dichloropropene		5	4.87	ug/L	97	(70-130)	20	0.83
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	5.08	ug/L	102	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	5.14	ug/L	103	(70-130)	20	1.2
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.780	ug/L	156	(50-150)		
LCS1	1,2,3-Trichloropropane		5	4.98	ug/L	100	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.25	ug/L	105	(70-130)	20	5.3
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.580	ug/L	116	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	5.08	ug/L	102	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.14	ug/L	103	(70-130)	20	1.2
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.730	ug/L	146	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.91	ug/L	98	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	1,2,4-Trimethylbenzene		5	5.04	ug/L	101	(70-130)	20	2.6
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,2-Dichloroethane		5	4.87	ug/L	97	(70-130)		
LCS2	1,2-Dichloroethane		5	4.99	ug/L	100	(70-130)	20	2.4
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	99.4	%	99	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			104	%	104	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
LCS1	1,2-Dichloropropane		5	4.90	ug/L	98	(70-130)		
LCS2	1,2-Dichloropropane		5	4.96	ug/L	99	(70-130)	20	1.2
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.93	ug/L	99	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	5.05	ug/L	101	(70-130)	20	2.4
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,3-Dichloropropane		5	4.82	ug/L	96	(70-130)		
LCS2	1,3-Dichloropropane		5	5.11	ug/L	102	(70-130)	20	5.8
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	2,2-Dichloropropane		5	4.50	ug/L	90	(70-130)		
LCS2	2,2-Dichloropropane		5	4.24	ug/L	85	(70-130)	20	6.0
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.480	ug/L	96	(50-150)		
LCS1	2-Butanone (MEK)		50	51.0	ug/L	102	(70-130)		
LCS2	2-Butanone (MEK)		50	52.2	ug/L	104	(70-130)	20	2.3
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.40	ug/L	108	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	98.2	%	98	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	101	%	101	(70-130)		
MBLK	4-Bromofluorobenzene (S)			101	%	101	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	97.0	%	97	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	99.2	%	99	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	54.5	ug/L	109	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	4-Methyl-2-Pentanone (MIBK)		50	56.6	ug/L	113	(70-130)	20	3.8
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.95	ug/L	99	(50-150)		
LCS1	Benzene		5	5.05	ug/L	101	(70-130)		
LCS2	Benzene		5	5.12	ug/L	102	(70-130)	20	1.4
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromobenzene		5	4.89	ug/L	98	(70-130)		
LCS2	Bromobenzene		5	5.03	ug/L	101	(70-130)	20	2.8
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromochloromethane		5	4.62	ug/L	92	(70-130)		
LCS2	Bromochloromethane		5	4.68	ug/L	94	(70-130)	20	1.3
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromodichloromethane		5	4.19	ug/L	84	(70-130)		
LCS2	Bromodichloromethane		5	4.28	ug/L	86	(70-130)	20	2.1
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	Bromoethane		5	4.80	ug/L	96	(70-130)		
LCS2	Bromoethane		5	4.97	ug/L	99	(70-130)	20	3.5
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Bromoform		5	3.70	ug/L	74	(70-130)		
LCS2	Bromoform		5	3.74	ug/L	75	(70-130)	20	1.1
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.390	ug/L	78	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.08	ug/L	102	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.40	ug/L	108	(70-130)	20	6.1
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.490	ug/L	98	(50-150)		
LCS1	Carbon disulfide		5	4.79	ug/L	96	(70-130)		
LCS2	Carbon disulfide		5	4.91	ug/L	98	(70-130)	20	2.5
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.500	ug/L	100	(50-150)		
LCS1	Carbon Tetrachloride		5	4.50	ug/L	90	(70-130)		
LCS2	Carbon Tetrachloride		5	4.49	ug/L	90	(70-130)	20	0.22
MBLK	Carbon Tetrachloride			<0.5	ug/L				

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 909215
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Carbon Tetrachloride		0.5	0.470	ug/L	94	(50-150)		
LCS1	Chlorobenzene		5	4.83	ug/L	97	(70-130)		
LCS2	Chlorobenzene		5	5.00	ug/L	100	(70-130)	20	3.5
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Chlorodibromomethane		5	4.38	ug/L	88	(70-130)		
LCS2	Chlorodibromomethane		5	4.46	ug/L	89	(70-130)	20	1.8
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.450	ug/L	90	(50-150)		
LCS1	Chloroethane		5	5.00	ug/L	100	(70-130)		
LCS2	Chloroethane		5	5.16	ug/L	103	(70-130)	20	3.1
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.57	ug/L	91	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.61	ug/L	92	(70-130)	20	0.87
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.510	ug/L	102	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.75	ug/L	95	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	5.23	ug/L	105	(70-130)	20	9.6
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.570	ug/L	114	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.67	ug/L	93	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.55	ug/L	91	(70-130)	20	2.6
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.550	ug/L	110	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.23	ug/L	85	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.41	ug/L	88	(70-130)	20	4.2
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Dibromomethane		5	4.58	ug/L	92	(70-130)		
LCS2	Dibromomethane		5	4.64	ug/L	93	(70-130)	20	1.3
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Dichlorodifluoromethane		5	5.85	ug/L	117	(70-130)		
LCS2	Dichlorodifluoromethane		5	6.05	ug/L	121	(70-130)	20	3.4
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	Dichloromethane		5	4.37	ug/L	87	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Dichloromethane		5	4.56	ug/L	91	(70-130)	20	4.3
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Di-isopropyl ether		5	4.70	ug/L	94	(70-130)		
LCS2	Di-isopropyl ether		5	4.83	ug/L	97	(70-130)	20	2.7
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.500	ug/L	100	(50-150)		
LCS1	Ethyl benzene		5	4.93	ug/L	99	(70-130)		
LCS2	Ethyl benzene		5	5.11	ug/L	102	(70-130)	20	3.6
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Hexachlorobutadiene		5	5.19	ug/L	104	(70-130)		
LCS2	Hexachlorobutadiene		5	5.22	ug/L	104	(70-130)	20	0.58
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.800	ug/L	160	(50-150)		
LCS1	Isopropylbenzene		5	5.04	ug/L	101	(70-130)		
LCS2	Isopropylbenzene		5	5.17	ug/L	103	(70-130)	20	2.5
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	m,p-Xylenes		10	9.97	ug/L	100	(70-130)		
LCS2	m,p-Xylenes		10	10.3	ug/L	103	(70-130)	20	3.3
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.990	ug/L	99	(50-150)		
MRLW	m,p-Xylenes		0.5	0.570	ug/L	114	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.82	ug/L	96	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.98	ug/L	100	(70-130)	20	3.3
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.550	ug/L	110	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.99	ug/L	100	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.00	ug/L	100	(70-130)	20	0.20
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Naphthalene		5	5.32	ug/L	106	(70-130)		
LCS2	Naphthalene		5	5.36	ug/L	107	(70-130)	20	0.75
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.740	ug/L	148	(50-150)		
LCS1	n-Butylbenzene		5	4.98	ug/L	100	(70-130)		
LCS2	n-Butylbenzene		5	5.10	ug/L	102	(70-130)	20	2.4

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.600	ug/L	120	(50-150)		
LCS1	n-Propylbenzene		5	4.87	ug/L	97	(70-130)		
LCS2	n-Propylbenzene		5	5.10	ug/L	102	(70-130)	20	4.6
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.560	ug/L	112	(50-150)		
LCS1	o-Chlorotoluene		5	4.79	ug/L	96	(70-130)		
LCS2	o-Chlorotoluene		5	4.94	ug/L	99	(70-130)	20	3.1
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.560	ug/L	112	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.94	ug/L	99	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.05	ug/L	101	(70-130)	20	2.2
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.590	ug/L	118	(50-150)		
LCS1	o-Xylene		5	4.85	ug/L	97	(70-130)		
LCS2	o-Xylene		5	4.96	ug/L	99	(70-130)	20	2.2
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.480	ug/L	96	(50-150)		
LCS1	p-Chlorotoluene		5	4.84	ug/L	97	(70-130)		
LCS2	p-Chlorotoluene		5	4.96	ug/L	99	(70-130)	20	2.5
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.540	ug/L	108	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.88	ug/L	98	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.06	ug/L	101	(70-130)	20	3.6
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.530	ug/L	106	(50-150)		
LCS1	p-Isopropyltoluene		5	5.08	ug/L	102	(70-130)		
LCS2	p-Isopropyltoluene		5	5.19	ug/L	104	(70-130)	20	2.1
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.500	ug/L	100	(50-150)		
LCS1	sec-Butylbenzene		5	5.69	ug/L	114	(70-130)		
LCS2	sec-Butylbenzene		5	5.79	ug/L	116	(70-130)	20	1.7
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Styrene		5	4.93	ug/L	99	(70-130)		
LCS2	Styrene		5	5.15	ug/L	103	(70-130)	20	4.4
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.490	ug/L	98	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	tert-amyl Methyl Ether		5	4.84	ug/L	97	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.84	ug/L	97	(70-130)	20	0.0
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.500	ug/L	100	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.98	ug/L	100	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	3.88	ug/L	78	(70-130)	20	<u>25</u>
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.510	ug/L	102	(50-150)		
LCS1	tert-Butylbenzene		5	4.98	ug/L	100	(70-130)		
LCS2	tert-Butylbenzene		5	5.11	ug/L	102	(70-130)	20	2.6
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.82	ug/L	96	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.95	ug/L	99	(70-130)	20	2.7
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Toluene		5	4.91	ug/L	98	(70-130)		
LCS2	Toluene		5	4.98	ug/L	100	(70-130)	20	1.4
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.530	ug/L	106	(50-150)		
LCS1	Toluene-d8 (S)		5	99.4	%	99	(70-130)		
LCS2	Toluene-d8 (S)		5	101	%	101	(70-130)		
MBLK	Toluene-d8 (S)			96.6	%	97	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	97.0	%	97	(70-130)		
MRL_LW	Toluene-d8 (S)		5	98.6	%	99	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.74	ug/L	95	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.76	ug/L	95	(70-130)	20	0.42
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.25	ug/L	85	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.30	ug/L	86	(70-130)	20	1.2
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.410	ug/L	82	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.89	ug/L	98	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.96	ug/L	99	(70-130)	20	1.4
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.550	ug/L	110	(50-150)		
LCS1	Trichlorofluoromethane		5	5.14	ug/L	103	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Trichlorofluoromethane		5	5.19	ug/L	104	(70-130)	20	0.97
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.25	ug/L	105	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	5.31	ug/L	106	(70-130)	20	1.1
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.550	ug/L	110	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.65	ug/L	93	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.43	ug/L	89	(70-130)	20	4.8
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.490	ug/L	98	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.270	ug/L	108	(50-150)		

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1295777

Analysis Date: 12/22/2020

DUP_202012170235	Total Dissolved Solid (TDS)	270		264	mg/L		(0-10)	10	0.76
DUP_202012170630	Total Dissolved Solid (TDS)	520		528	mg/L		(0-10)	10	1.9
LCS1	Total Dissolved Solid (TDS)		175	170	mg/L	97	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	698	mg/L	100	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	7.00	mg/L	70	(50-150)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1295808

Analysis Date: 12/22/2020

LCS1	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0121	ug/L	61	(50-150)		
MS_202011100648	Hexavalent chromium(Dissolved)	0.30	2	2.42	ug/L	106	(90-110)		
MSD_202011100648	Hexavalent chromium(Dissolved)	0.30	2	2.43	ug/L	106	(90-110)	20	0.45

EPA Method 537.1 by EPA 537.1

Prep Batch: 1295045 Analytical Batch: 1295814

Analysis Date: 12/22/2020

DUP_202012170406	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0252	ug/L	107	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0252	ug/L	107	(70-130)	30	0.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00194	ug/L	103	(50-150)		
MS1_202012170405	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0248	ug/L	105	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202012170406	13C2-PFDA (S)			96.2	%	96	(70-130)		
LCS1	13C2-PFDA (S)		100	106	%	106	(70-130)		
LCS2	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	106	%	106	(70-130)		
MS1_202012170405	13C2-PFDA (S)		100	103	%	103	(70-130)		
DUP_202012170406	13C2-PFHxA (S)			94.4	%	94	(70-130)		
LCS1	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS2	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFHxA (S)			111	%	111	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MS1_202012170405	13C2-PFHxA (S)		100	102	%	102	(70-130)		
DUP_202012170406	13C2-PFOA- IS#1 (I)			106	%	107	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	89.4	%	89	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	93.1	%	93	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			94.5	%	94	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	91.8	%	92	(50-150)		
MS1_202012170405	13C2-PFOA- IS#1 (I)		100	92.9	%	93	(50-150)		
DUP_202012170406	13C3-HFPO-DA (S)			89.6	%	90	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	96.2	%	96	(70-130)		
MBLK	13C3-HFPO-DA (S)			104	%	104	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MS1_202012170405	13C3-HFPO-DA (S)		100	99.8	%	100	(70-130)		
DUP_202012170406	13C4-PFOS- IS#2 (I)			91.6	%	92	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	90.8	%	91	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	92.8	%	93	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			93.4	%	93	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	92.5	%	92	(50-150)		
MS1_202012170405	13C4-PFOS- IS#2 (I)		100	91.4	%	91	(50-150)		
DUP_202012170406	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0277	ug/L	117	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0277	ug/L	117	(70-130)	30	0.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00220	ug/L	116	(50-150)		
MS1_202012170405	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0260	ug/L	110	(70-130)		
DUP_202012170406	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0265	ug/L	114	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0261	ug/L	112	(70-130)	30	1.5
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00203	ug/L	109	(50-150)		
MS1_202012170405	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0260	ug/L	112	(70-130)		
DUP_202012170406	d3-NMeFOSAA (I)			90.7	%	91	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	90.3	%	90	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	94.1	%	94	(50-150)		
MBLK	d3-NMeFOSAA (I)			95.9	%	96	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	93.0	%	93	(50-150)		
MS1_202012170405	d3-NMeFOSAA (I)		100	89.8	%	90	(50-150)		
DUP_202012170406	d5-NEtFOSAA (S)			100	%	100	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	99.3	%	99	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	96.4	%	96	(70-130)		
MBLK	d5-NEtFOSAA (S)			99.4	%	99	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	98.6	%	99	(70-130)		
MS1_202012170405	d5-NEtFOSAA (S)		100	98.4	%	98	(70-130)		
DUP_202012170406	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0266	ug/L	106	(70-130)	30	2.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00209	ug/L	104	(50-150)		
MS1_202012170405	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0271	ug/L	108	(70-130)		
DUP_202012170406	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0268	ug/L	107	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS1_202012170405	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0272	ug/L	109	(70-130)		
DUP_202012170406	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0276	ug/L	110	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0274	ug/L	110	(70-130)	30	0.73
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00218	ug/L	109	(50-150)		
MS1_202012170405	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0263	ug/L	105	(70-130)		
DUP_202012170406	Perfluorobutanesulfonic acid (PFBS)	0.0098		0.0105	ug/L		(0-30)	30	6.3
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0237	ug/L	107	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0238	ug/L	108	(70-130)	30	0.84
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00179	ug/L	101	(50-150)		
MS1_202012170405	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0235	ug/L	105	(70-130)		
DUP_202012170406	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0282	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0280	ug/L	112	(70-130)	30	0.71
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00224	ug/L	112	(50-150)		
MS1_202012170405	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0263	ug/L	105	(70-130)		
DUP_202012170406	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0266	ug/L	107	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0272	ug/L	109	(70-130)	30	1.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00204	ug/L	102	(50-150)		
MS1_202012170405	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0255	ug/L	102	(70-130)		
DUP_202012170406	Perfluoroheptanoic acid (PFHpA)	0.0039		0.00347	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0297	ug/L	119	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0294	ug/L	118	(70-130)	30	1.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00241	ug/L	120	(50-150)		
MS1_202012170405	Perfluoroheptanoic acid (PFHpA)	0.0039	0.025	0.0308	ug/L	108	(70-130)		
DUP_202012170406	Perfluorohexanesulfonic acid (PFHxS)	0.0028		0.00279	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0255	ug/L	112	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0259	ug/L	114	(70-130)	30	1.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00201	ug/L	110	(50-150)		
MS1_202012170405	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0249	ug/L	109	(70-130)		
DUP_202012170406	Perfluorohexanoic acid (PFHxA)	0.0079		0.00724	ug/L		(0-30)	30	8.9
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0278	ug/L	111	(70-130)	30	1.8
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202012170405	Perfluorohexanoic acid (PFHxA)	0.0076	0.025	0.0344	ug/L	107	(70-130)		
DUP_202012170406	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0299	ug/L	120	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0297	ug/L	119	(70-130)	30	0.67
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00231	ug/L	116	(50-150)		
MS1_202012170405	Perfluorononanoic acid (PFNA)	ND	0.025	0.0278	ug/L	111	(70-130)		

Spike recovery is already corrected for native results.
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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 909215
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202012170406	Perfluorooctanesulfonic acid (PFOS)	0.0072		0.00704	ug/L		(0-30)	30	2.3
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0259	ug/L	112	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0264	ug/L	114	(70-130)	30	1.9
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00206	ug/L	111	(50-150)		
MS1_202012170405	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0255	ug/L	110	(70-130)		
DUP_202012170406	Perfluorooctanoic acid (PFOA)	0.0099		0.00938	ug/L		(0-30)	30	5.5
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0284	ug/L	114	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0285	ug/L	114	(70-130)	30	0.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00231	ug/L	116	(50-150)		
MS1_202012170405	Perfluorooctanoic acid (PFOA)	0.0024	0.025	0.0294	ug/L	108	(70-130)		
DUP_202012170406	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0276	ug/L	110	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0275	ug/L	110	(70-130)	30	0.36
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00213	ug/L	106	(50-150)		
MS1_202012170405	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0256	ug/L	102	(70-130)		
DUP_202012170406	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0266	ug/L	107	(70-130)	30	0.38
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00200	ug/L	100	(50-150)		
MS1_202012170405	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0243	ug/L	97	(70-130)		
DUP_202012170406	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0279	ug/L	112	(70-130)	30	0.36
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00215	ug/L	107	(50-150)		
MS1_202012170405	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0267	ug/L	107	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1295306 Analytical Batch: 1295815

Analysis Date: 12/23/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0469	ug/L	100	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0477	ug/L	101	(70-130)	30	1.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00188	ug/L	100	(50-150)		
MS_202012180350	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00193	ug/L	101	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202012180350	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00182	ug/L	96	(50-150)	50	5.7
LCS3	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS4	13C2-PFDA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFDA (S)			108	%	108	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	109	%	109	(70-130)		
MS_202012180350	13C2-PFDA (S)		100	109	%	109	(70-130)		
MSD_202012180350	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS3	13C2-PFHxA (S)		100	111	%	111	(70-130)		
LCS4	13C2-PFHxA (S)		100	106	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			99.7	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	104	%	104	(70-130)		
MS_202012180350	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MSD_202012180350	13C2-PFHxA (S)		100	105	%	105	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	99.8	%	100	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	96.4	%	96	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			99.8	%	100	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MS_202012180350	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MSD_202012180350	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MBLK	13C3-HFPO-DA (S)			91.4	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	99.7	%	100	(70-130)		
MS_202012180350	13C3-HFPO-DA (S)		100	98.4	%	98	(70-130)		
MSD_202012180350	13C3-HFPO-DA (S)		100	94.5	%	95	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	96.5	%	96	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	91.4	%	91	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			93.5	%	93	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	96.9	%	97	(50-150)		
MS_202012180350	13C4-PFOS- IS#2 (I)		100	97.6	%	98	(50-150)		
MSD_202012180350	13C4-PFOS- IS#2 (I)		100	99.8	%	100	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0465	ug/L	96	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0462	ug/L	95	(70-130)	30	0.65
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00193	ug/L	102	(50-150)		
MS_202012180350	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00198	ug/L	105	(50-150)		
MSD_202012180350	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00191	ug/L	101	(50-150)	50	3.8
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0468	ug/L	101	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0485	ug/L	104	(70-130)	30	3.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00201	ug/L	108	(50-150)		
MS_202012180350	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00199	ug/L	106	(50-150)		
MSD_202012180350	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00192	ug/L	102	(50-150)	50	3.8
LCS3	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			103	%	103	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MS_202012180350	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MSD_202012180350	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	108	%	108	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	107	%	107	(70-130)		
MS_202012180350	d5-NEtFOSAA (S)		100	109	%	109	(70-130)		
MSD_202012180350	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0463	ug/L	93	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0476	ug/L	95	(70-130)	30	2.8
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00202	ug/L	101	(50-150)		
MS_202012180350	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00180	ug/L	90	(50-150)		
MSD_202012180350	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00172	ug/L	86	(50-150)	50	4.5
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0510	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0497	ug/L	99	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00207	ug/L	104	(50-150)		
MS_202012180350	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00217	ug/L	107	(50-150)		
MSD_202012180350	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00195	ug/L	96	(50-150)	50	11
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0508	ug/L	102	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0490	ug/L	98	(70-130)	30	3.6
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00212	ug/L	106	(50-150)		
MS_202012180350	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00208	ug/L	101	(50-150)		
MSD_202012180350	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00210	ug/L	103	(50-150)	50	1.1
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0428	ug/L	97	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0451	ug/L	102	(70-130)	30	5.0
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00184	ug/L	104	(50-150)		
MS_202012180350	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00184	ug/L	103	(50-150)		
MSD_202012180350	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00177	ug/L	100	(50-150)	50	3.7
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0494	ug/L	99	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0514	ug/L	103	(70-130)	30	4.0
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202012180350	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00207	ug/L	102	(50-150)		
MSD_202012180350	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00211	ug/L	104	(50-150)	50	1.9
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0457	ug/L	91	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0453	ug/L	91	(70-130)	30	0.88
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00182	ug/L	91	(50-150)		
MS_202012180350	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00185	ug/L	92	(50-150)		
MSD_202012180350	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00184	ug/L	91	(50-150)	50	0.57
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0491	ug/L	98	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0476	ug/L	95	(70-130)	30	3.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202012180350	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00215	ug/L	106	(50-150)		
MSD_202012180350	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00210	ug/L	104	(50-150)	50	2.2
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0469	ug/L	103	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0486	ug/L	107	(70-130)	30	3.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00200	ug/L	110	(50-150)		
MS_202012180350	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00205	ug/L	112	(50-150)		
MSD_202012180350	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00189	ug/L	103	(50-150)	50	8.1
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0499	ug/L	100	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0496	ug/L	99	(70-130)	30	0.60
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202012180350	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00220	ug/L	107	(50-150)		
MSD_202012180350	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00210	ug/L	102	(50-150)	50	4.8
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0494	ug/L	99	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0511	ug/L	102	(70-130)	30	3.4
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202012180350	Perfluorononanoic acid (PFNA)	ND	0.002	0.00224	ug/L	111	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202012180350	Perfluorononanoic acid (PFNA)	ND	0.002	0.00220	ug/L	109	(50-150)	50	2.0
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0475	ug/L	103	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0487	ug/L	105	(70-130)	30	2.5
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00207	ug/L	112	(50-150)		
MS_202012180350	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00208	ug/L	108	(50-150)		
MSD_202012180350	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00204	ug/L	106	(50-150)	50	1.9
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0511	ug/L	102	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0514	ug/L	103	(70-130)	30	0.59
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00226	ug/L	113	(50-150)		
MS_202012180350	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00229	ug/L	109	(50-150)		
MSD_202012180350	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00226	ug/L	108	(50-150)	50	1.1
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0467	ug/L	93	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0484	ug/L	97	(70-130)	30	3.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00184	ug/L	92	(50-150)		
MS_202012180350	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00195	ug/L	95	(50-150)		
MSD_202012180350	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00193	ug/L	94	(50-150)	50	1.2
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0458	ug/L	92	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0461	ug/L	92	(70-130)	30	0.44
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00186	ug/L	93	(50-150)		
MS_202012180350	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00191	ug/L	95	(50-150)		
MSD_202012180350	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00188	ug/L	93	(50-150)	50	1.8
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0506	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0534	ug/L	107	(70-130)	30	5.4
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202012180350	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00222	ug/L	110	(50-150)		
MSD_202012180350	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00215	ug/L	106	(50-150)	50	3.4

EPA Method 537.1 by EPA 537.1

Prep Batch: 1295349 Analytical Batch: 1295820

Analysis Date: 12/23/2020

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0454	ug/L	96	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0450	ug/L	96	(70-130)	30	0.89
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00194	ug/L	103	(50-150)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202012180328	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0243	ug/L	103	(70-130)		
MSD1_202012180328	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0240	ug/L	102	(70-130)	30	1.4
LCS3	13C2-PFDA (S)		100	109	%	109	(70-130)		
LCS4	13C2-PFDA (S)		100	102	%	102	(70-130)		
MBLK	13C2-PFDA (S)			105	%	105	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	106	%	106	(70-130)		
MS1_202012180328	13C2-PFDA (S)		100	104	%	104	(70-130)		
MSD1_202012180328	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS3	13C2-PFHxA (S)		100	105	%	105	(70-130)		
LCS4	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	103	%	103	(70-130)		
MS1_202012180328	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MSD1_202012180328	13C2-PFHxA (S)		100	100	%	100	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	95.7	%	96	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	96.3	%	96	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			97.1	%	97	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	99.7	%	100	(50-150)		
MS1_202012180328	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MSD1_202012180328	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MBLK	13C3-HFPO-DA (S)			100	%	101	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
MS1_202012180328	13C3-HFPO-DA (S)		100	96.7	%	97	(70-130)		
MSD1_202012180328	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	95.6	%	96	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	96.8	%	97	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			96.1	%	96	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	96.4	%	96	(50-150)		
MS1_202012180328	13C4-PFOS- IS#2 (I)		100	93.6	%	94	(50-150)		
MSD1_202012180328	13C4-PFOS- IS#2 (I)		100	95.2	%	95	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0468	ug/L	97	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0487	ug/L	100	(70-130)	30	4.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00221	ug/L	117	(50-150)		
MS1_202012180328	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0240	ug/L	102	(70-130)		
MSD1_202012180328	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0246	ug/L	104	(70-130)	30	2.4

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 909215
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0460	ug/L	99	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0460	ug/L	99	(70-130)	30	0.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00210	ug/L	113	(50-150)		
MS1_202012180328	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0250	ug/L	107	(70-130)		
MSD1_202012180328	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0251	ug/L	108	(70-130)	30	0.29
LCS3	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	109	%	109	(50-150)		
MBLK	d3-NMeFOSAA (I)			111	%	111	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	110	%	110	(50-150)		
MS1_202012180328	d3-NMeFOSAA (I)		100	111	%	111	(50-150)		
MSD1_202012180328	d3-NMeFOSAA (I)		100	113	%	113	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	98.6	%	99	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	99.4	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			94.5	%	95	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	97.0	%	97	(70-130)		
MS1_202012180328	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MSD1_202012180328	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0499	ug/L	100	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0489	ug/L	98	(70-130)	30	2.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00226	ug/L	113	(50-150)		
MS1_202012180328	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0240	ug/L	96	(70-130)		
MSD1_202012180328	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0245	ug/L	98	(70-130)	30	2.0
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0484	ug/L	97	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0490	ug/L	98	(70-130)	30	1.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		
MS1_202012180328	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0257	ug/L	103	(70-130)		
MSD1_202012180328	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0248	ug/L	99	(70-130)	30	3.6
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0499	ug/L	100	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0509	ug/L	102	(70-130)	30	2.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00223	ug/L	111	(50-150)		
MS1_202012180328	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0269	ug/L	107	(70-130)		
MSD1_202012180328	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0265	ug/L	106	(70-130)	30	1.4
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0479	ug/L	108	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0474	ug/L	107	(70-130)	30	1.1

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00215	ug/L	121	(50-150)		
MS1_202012180328	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0257	ug/L	116	(70-130)		
MSD1_202012180328	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0261	ug/L	118	(70-130)	30	1.6
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0519	ug/L	104	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0508	ug/L	102	(70-130)	30	2.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00239	ug/L	120	(50-150)		
MS1_202012180328	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0258	ug/L	103	(70-130)		
MSD1_202012180328	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0261	ug/L	104	(70-130)	30	1.2
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0451	ug/L	90	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0433	ug/L	87	(70-130)	30	4.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00185	ug/L	93	(50-150)		
MS1_202012180328	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0225	ug/L	90	(70-130)		
MSD1_202012180328	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0232	ug/L	93	(70-130)	30	3.1
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0490	ug/L	98	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0481	ug/L	96	(70-130)	30	2.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00231	ug/L	115	(50-150)		
MS1_202012180328	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0252	ug/L	101	(70-130)		
MSD1_202012180328	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0263	ug/L	105	(70-130)	30	4.5
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0489	ug/L	107	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0496	ug/L	109	(70-130)	30	1.4
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00222	ug/L	122	(50-150)		
MS1_202012180328	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0251	ug/L	110	(70-130)		
MSD1_202012180328	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0262	ug/L	115	(70-130)	30	4.2
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0509	ug/L	102	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0519	ug/L	104	(70-130)	30	2.0
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS1_202012180328	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0262	ug/L	104	(70-130)		
MSD1_202012180328	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0264	ug/L	105	(70-130)	30	0.86
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0546	ug/L	109	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0529	ug/L	106	(70-130)	30	3.2
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00247	ug/L	124	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202012180328	Perfluorononanoic acid (PFNA)	ND	0.025	0.0267	ug/L	107	(70-130)		
MSD1_202012180328	Perfluorononanoic acid (PFNA)	ND	0.025	0.0280	ug/L	112	(70-130)	30	4.8
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)	30	0.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00227	ug/L	123	(50-150)		
MS1_202012180328	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0254	ug/L	109	(70-130)		
MSD1_202012180328	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0260	ug/L	112	(70-130)	30	2.7
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0532	ug/L	106	(70-130)	30	0.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00260	ug/L	130	(50-150)		
MS1_202012180328	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0280	ug/L	112	(70-130)		
MSD1_202012180328	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0286	ug/L	114	(70-130)	30	1.9
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0480	ug/L	96	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0469	ug/L	94	(70-130)	30	2.3
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00209	ug/L	104	(50-150)		
MS1_202012180328	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0237	ug/L	95	(70-130)		
MSD1_202012180328	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0242	ug/L	97	(70-130)	30	2.1
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0451	ug/L	90	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0454	ug/L	91	(70-130)	30	0.66
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00192	ug/L	96	(50-150)		
MS1_202012180328	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0233	ug/L	93	(70-130)		
MSD1_202012180328	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0252	ug/L	101	(70-130)	30	7.9
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0519	ug/L	104	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0521	ug/L	104	(70-130)	30	0.39
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00233	ug/L	116	(50-150)		
MS1_202012180328	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0267	ug/L	107	(70-130)		
MSD1_202012180328	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0276	ug/L	110	(70-130)	30	3.3

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1296968

Analysis Date: 12/30/2020

LCS1	Alkalinity in CaCO3 units	100	100	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units	100	97.3	mg/L	97	(90-110)	20	2.7
MBLK	Alkalinity in CaCO3 units		<1	mg/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 909215
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Alkalinity in CaCO3 units		2	1.79	mg/L	90	(50-150)		
MS_202012180213	Alkalinity in CaCO3 units	66	100	113	mg/L	<u>47</u>	(80-120)		
MS_202012230409	Alkalinity in CaCO3 units	26	100	122	mg/L	97	(80-120)		
MSD_202012180213	Alkalinity in CaCO3 units	66	100	110	mg/L	<u>44</u>	(80-120)	20	3.1
MSD_202012230409	Alkalinity in CaCO3 units	26	100	129	mg/L	103	(80-120)	20	5.1

Perchlorate by EPA 314.0

Analytical Batch: 1297375

Analysis Date: 12/31/2020

LCS1	Perchlorate		25	24.9	ug/L	100	(85-115)		
LCS2	Perchlorate		25	25.4	ug/L	102	(85-115)	15	2.4
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	4.04	ug/L	101	(75-125)		
MS_202012080214	Perchlorate	ND	25	23.0	ug/L	92	(80-120)		
MSD_202012080214	Perchlorate	ND	25	22.6	ug/L	90	(80-120)	15	1.9

Total Organic Carbon by SM 5310C

Analytical Batch: 1299085

Analysis Date: 01/12/2021

LCS1	Total Organic Carbon		5	5.32	mg/L	106	(90-110)		
LCS2	Total Organic Carbon		5	5.36	mg/L	107	(90-110)	20	0.75
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.236	mg/L	118	(50-150)		
MS_202012170066	Total Organic Carbon	4.1	4	8.51	mg/L	110	(80-120)		
MSD_202012170066	Total Organic Carbon	4.1	4	8.48	mg/L	109	(80-120)	20	0.24

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 01/13/2021

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 01/13/2021

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 01/13/2021

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 01/13/2021

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-46686-1
Client Project/Site: 909215

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
12/29/2020 8:18:16 AM

Lori Thompson, Project Manager I
(714)895-5494
Lori.Thompson@eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 909215

Job ID: 570-46686-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⌘	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 909215

Job ID: 570-46686-1

Job ID: 570-46686-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-46686-1

Comments

No additional comments.

Receipt

The sample was received on 12/18/2020 11:10 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.0° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-118199. LCS/LCSD were performed to meet requirements.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 909215

Job ID: 570-46686-1

Client Sample ID: 202012170418

Lab Sample ID: 570-46686-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	0.956		0.956	0.765	mg/L	1		1664A	Total/NA

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 909215

Job ID: 570-46686-1

General Chemistry

Client Sample ID: 202012170418

Date Collected: 12/17/20 12:21

Date Received: 12/18/20 11:10

Lab Sample ID: 570-46686-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	0.956		0.956	0.765	mg/L		12/22/20 15:43	12/28/20 10:49	1

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QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 909215

Job ID: 570-46686-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-118199/1-A
Matrix: Water
Analysis Batch: 118911

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 118199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		12/22/20 15:43	12/28/20 10:49	1

Lab Sample ID: LCS 570-118199/2-A
Matrix: Water
Analysis Batch: 118911

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 118199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	36.70		mg/L		92	78 - 114

Lab Sample ID: LCSD 570-118199/3-A
Matrix: Water
Analysis Batch: 118911

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 118199

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.80		mg/L		92	78 - 114	0	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 909215

Job ID: 570-46686-1

General Chemistry

Prep Batch: 118199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-46686-1	202012170418	Total/NA	Water	1664A	
MB 570-118199/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-118199/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-118199/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 118911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-46686-1	202012170418	Total/NA	Water	1664A	118199
MB 570-118199/1-A	Method Blank	Total/NA	Water	1664A	118199
LCS 570-118199/2-A	Lab Control Sample	Total/NA	Water	1664A	118199
LCSD 570-118199/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	118199

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 909215

Job ID: 570-46686-1

Client Sample ID: 202012170418

Lab Sample ID: 570-46686-1

Date Collected: 12/17/20 12:21

Matrix: Water

Date Received: 12/18/20 11:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1046 mL	1000 mL	118199	12/22/20 15:43	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			118911	12/28/20 10:49	F7UI	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 909215

Job ID: 570-46686-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-20 *
California	State	2944	09-30-21
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-29-21
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 909215

Job ID: 570-46686-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 909215

Job ID: 570-46686-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-46686-1	202012170418	Water	12/17/20 12:21	12/18/20 11:10	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

46086
Date: 12/18/2020

Submittal Form

***REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**
Report & Invoice must have the Folder# 909215 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.
Results must have Complete data & QC with Approval Signature.

eurofins
Eaton Analytical

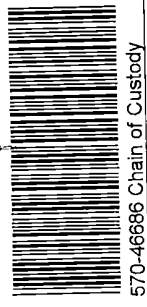
Ship To:
Eurofins CalScience
7440 Lincoln Way
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 909215
Report Due: 01/05/2021

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: Eaton-MonroviaSubContract@eurofins.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the
Specified State Certification # and
Exp Date for requested tests + matrix
Samples from CALIFORNIA



570-46686 Chain of Custody

Sample ID 202012170418 **Client Sample ID for reference onl** MB-INF-20201217 **Sample Date & Time Matrix** 12/17/20 1221 DW **PWS Systemcode** PWSID **PWS** JLS

Sample type: Oil and Grease by 1664(subbed) **Sample Event:** Analysis Requested **Facility ID:** **Static ID:**

Method PA 1664 **Prep Method** Oil and Grease by 1664(subbed)

Relinquished by: [Signature] **Date** 12/18/20 **Time** 1110
Received by: [Signature] **Date** 12/18/20 **Time** 1110
Relinquished by: [Signature] **Date** _____ **Time** _____
Received by: [Signature] **Date** _____ **Time** _____

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgment of Receipt is requested to affirm Jackie Contreras

2/8/20 scb

Page 1 of 1
750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016 Tel (626) 386-1100 Fax (866) 988-3757 www.EurofinsUS.com/Eaton
Page 13 of 14

12/29/2020

Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-46686-1

Login Number: 46686

List Source: Eurofins Calscience

List Number: 1

Creator: Ramos, Maribel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 911833
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 911833
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **January 07, 2021 at 1440**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202101070382</u>	GAC-5-20210107 Static ID: 537.1 @537.1	01/07/2021 1313
<u>202101070383</u>	GAC-6-20210107 Static ID: 537.1 @537.1	01/07/2021 1316
<u>202101070384</u>	GAC-7-20210107 Static ID: 537.1 @537.1	01/07/2021 1319
<u>202101070385</u>	GAC-8-20210107 Static ID: 537.1 @537.1	01/07/2021 1322
<u>202101070386</u>	IX-5-20210107 Static ID: 537.1 @537.1	01/07/2021 1325
<u>202101070387</u>	IX-6-20210107 Static ID: 537.1 @537.1	01/07/2021 1328
<u>202101070388</u>	IX-7-20210107 Static ID: 537.1 @537.1	01/07/2021 1331
<u>202101070389</u>	IX-8-20210107 Static ID: 537.1 @537.1	01/07/2021 1334
<u>202101070390</u>	MB-INF-20210107 Dissolved Organic Carbon Total Organic Carbon	01/07/2021 1337

Test Description

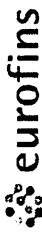
@537.1 -- EPA Method 537.1

911833

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302					
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		LAB CONTACT: Sophia Liang					
LABORATORY: Eurofins Eaton Analytical		GLOBAL ID: Miae Jeon		SAMPLER(S): (PRINT) Robert Torres					
REQUESTED ANALYSES Please check box or fill in blank as needed.									
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		NO. OF CONT.	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)
		DATE	TIME						
	GAG-1			2	Unpreserved	*	*	*	*
	GAG-2				Preserved	*			
	GAG-3					*			
	GAG-4					*			
	IX-1					*			
	IX-2					*			
	IX-3					*			
	IX-4					*			
	LH-INF					*	*	*	*
	LH-INF-DUP					*	*	*	*
	GAC-5-20210107	1-7-21	1313	2					
	GAC-6-20210107		1316	2					
	GAC-7-20210107		1319	2					
	GAC-8-20210107		1322	2					
Relinquished by: (Signature) Robert Torres				Received by: (Signature) Chris Brook		Date: 1-7-2021		Time: 1439	
Relinquished by: (Signature)				Received by: (Signature)		Date: 1-7-21		Time: 1440	
Relinquished by: (Signature)				Received by: (Signature)		Date:		Time:	

91833

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302																			
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		LAB CONTACT: Sophia Liang																			
LABORATORY: Eurofins Eaton Analytical		GLOBAL ID:		SAMPLER(S), (PRINT) Robert Torres																			
REQUESTED ANALYSES Please check box or fill in blank as needed.																							
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)											
		DATE	TIME																				
	IX-5 - 20210107	1-7-21	1325	Water	2		2		X														
	IX-6 - 20210107	↓		Water	2		2		X														
	IX-7 - 20210107	↓		Water	2		2		X														
	IX-8 - 20210107	↓		Water	2		2		X														
	MB-INF - 20210107	↓		Water	2		1	1	X	X	X	X											
	MB-INF-DUP			-Water																			
	FB			Water																			
Relinquished by: (Signature) Robert Torres													Received by: (Signature)		Date: 1-7-21	Time: 1439							
Relinquished by: (Signature)													Received by: (Signature) <i>Chak Brooker</i>		Date: 1-7-21	Time: 1440							
Relinquished by: (Signature)													Received by: (Signature)		Date:	Time:							



Eaton Analytical

Kit Order for Water Replenishment District

Sophia F Liang is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (666) 988-3757

Created Date & Time: 12/22/2020 11:45:25AM

Note: Sampler Please return this paper with your samples

Kit #: 279254
Created By: Anisha Zachariah - [ZR4B]
Deliver By: 12/29/2020
STG: Bottle Orders
Ice Type: G

Client ID: WRD
Project Code: 0250000 Bottle Orders
Group Name: WRD Pilot (DOC/TOC)
PO#/JOB#:
Description: WRD Pilot (DOC/TOC)
Shipping Method: Courier

Ship Sample Kits to
GSI
7701 Warner Ave
Huntington Beach, CA 92647
USA
Attr: Robert Torres - Home

Send Report to
Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attr: Joseph Liles
Phone: 562-275-4226

Billing Address
Water Replenishment District

Attr: Eurofins Calscience

Water Replenishment District
4040 Paramount Blvd
Lakewood, CA 90712

Attr: Brian Partington
Phone: 562-275-4249
Fax: 562-921-6101

# of Sample Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
1	Total Organic Carbon	2	UN1830
1	Dissolved Organic Carbon	6	
2 - 125ml amber glass [0.5 ml H2SO4 (50%)]			
6 - 125ml amber glass [no preservative]			

Sum Tests: 2

Sum Bottles: 8

Comments

SHIPPING:
Label coolers: DOC/TOC
FOR DELIVERY VIA COURIER ON TUES, DECEMBER 29

Code Status Date Shipped Via Tracking # # of Coolers Prepared By



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 91833

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616 (Observation = 13.9 °C) (Corr.Factor = -0.12 °C) (Final = 13.7 °C)

TYPE OF ICE: Real Synthetic No Ice Condition of ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥ 10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr.Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date _____ Results _____

7) VOA and Radon Headspace: _____

No Samples with Headspace: _____

Samples with Headspace (see below): _____

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 516-4, HAA(6251,652), 605, SPME, @CH, 532LCMS, 656, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: <u>Chris Grobner</u>	PRINT NAME: <u>Chris Grobner</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>1-7-21</u>	TIME: <u>1440</u>
-----------------------------------	----------------------------------	---	---------------------	-------------------

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 911833
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/07/2021 1440

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202101070382 <u>GAC-5-20210107</u>						
01/11/2021 20:37	Perfluorobutanesulfonic acid (PFBS)		0.0097		ug/L	0.0020
01/11/2021 20:37	Perfluoroheptanoic acid (PFHpA)		0.0037		ug/L	0.0020
01/11/2021 20:37	Perfluorohexanesulfonic acid (PFHxS)		0.0027		ug/L	0.0020
01/11/2021 20:37	Perfluorohexanoic acid (PFHxA)		0.0073		ug/L	0.0020
01/11/2021 20:37	Perfluorooctanesulfonic acid (PFOS)		0.0062		ug/L	0.0020
01/11/2021 20:37	Perfluorooctanoic acid (PFOA)		0.0097		ug/L	0.0020
202101070383 <u>GAC-6-20210107</u>						
01/11/2021 19:40	Perfluorobutanesulfonic acid (PFBS)		0.014		ug/L	0.0020
01/11/2021 19:40	Perfluoroheptanoic acid (PFHpA)		0.0055		ug/L	0.0020
01/11/2021 19:40	Perfluorohexanoic acid (PFHxA)		0.0094		ug/L	0.0020
01/11/2021 19:40	Perfluorooctanoic acid (PFOA)		0.0043		ug/L	0.0020
202101070384 <u>GAC-7-20210107</u>						
01/11/2021 19:59	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
01/11/2021 19:59	Perfluoroheptanoic acid (PFHpA)		0.0043		ug/L	0.0020
01/11/2021 19:59	Perfluorohexanesulfonic acid (PFHxS)		0.0044		ug/L	0.0020
01/11/2021 19:59	Perfluorohexanoic acid (PFHxA)		0.0078		ug/L	0.0020
01/11/2021 19:59	Perfluorooctanesulfonic acid (PFOS)		0.0064		ug/L	0.0020
01/11/2021 19:59	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
202101070385 <u>GAC-8-20210107</u>						
01/11/2021 20:47	Perfluorobutanesulfonic acid (PFBS)		0.0075		ug/L	0.0020
01/11/2021 20:47	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
01/11/2021 20:47	Perfluorohexanoic acid (PFHxA)		0.0058		ug/L	0.0020
01/11/2021 20:47	Perfluorooctanesulfonic acid (PFOS)		0.0020		ug/L	0.0020
01/11/2021 20:47	Perfluorooctanoic acid (PFOA)		0.0040		ug/L	0.0020
202101070386 <u>IX-5-20210107</u>						
01/11/2021 20:56	Perfluorohexanoic acid (PFHxA)		0.0054		ug/L	0.0020
01/11/2021 20:56	Perfluorooctanoic acid (PFOA)		0.0028		ug/L	0.0020
202101070387 <u>IX-6-20210107</u>						
01/13/2021 14:26	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
01/13/2021 14:26	Perfluorohexanoic acid (PFHxA)		0.0067		ug/L	0.0020
01/13/2021 14:26	Perfluorooctanoic acid (PFOA)		0.0020		ug/L	0.0020
202101070388 <u>IX-7-20210107</u>						
01/11/2021 21:15	Perfluoroheptanoic acid (PFHpA)		0.0044		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/07/2021 1440

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
01/11/2021 21:15	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
01/11/2021 21:15	Perfluorooctanoic acid (PFOA)		0.0059		ug/L	0.0020
	202101070389	<u>IX-8-20210107</u>				
01/11/2021 21:25	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
01/11/2021 21:25	Perfluorohexanoic acid (PFHxA)		0.0069		ug/L	0.0020
01/11/2021 21:25	Perfluorooctanoic acid (PFOA)		0.0025		ug/L	0.0020
	202101070390	<u>MB-INF-20210107</u>				
01/22/2021 09:07	Dissolved Organic Carbon		0.80		mg/L	0.20
01/15/2021 19:53	Total Organic Carbon		0.70		mg/L	0.20

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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/07/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-5-20210107 (202101070382)					Sampled on 01/07/2021 1313				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0097	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0037	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0027	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0073	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0062	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0097	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	13C2-PFDA	104	%		1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	13C2-PFHxA	101	%		1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	13C3-HFPO-DA	100	%		1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	d3-NMeFOSAA	120	%		1
01/09/21	01/11/21 20:37	1298553	1298913	(EPA 537.1)	d5-NEtFOSAA	96	%		1

GAC-6-20210107 (202101070383)					Sampled on 01/07/2021 1316				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/07/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.014	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0055	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0094	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0043	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	13C2-PFDA	106	%		1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	13C2-PFHxA	105	%		1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	13C3-HFPO-DA	101	%		1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	d3-NMeFOSAA	119	%		1
01/09/21	01/11/21 19:40	1298553	1298913	(EPA 537.1)	d5-NEtFOSAA	96	%		1

GAC-7-20210107 (202101070384)

Sampled on 01/07/2021 1319

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/07/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0043	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0044	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0078	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0064	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	13C2-PFDA	109	%		1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	13C2-PFHxA	108	%		1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	13C3-HFPO-DA	104	%		1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	d3-NMeFOSAA	117	%		1
01/09/21	01/11/21 19:59	1298553	1298913	(EPA 537.1)	d5-NEtFOSAA	102	%		1

GAC-8-20210107 (202101070385)

Sampled on 01/07/2021 1322

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0075	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0058	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/07/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0020	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0040	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	13C2-PFDA	105	%		1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	13C2-PFHxA	105	%		1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	d3-NMeFOSAA	120	%		1
01/09/21	01/11/21 20:47	1298553	1298913	(EPA 537.1)	d5-NEtFOSAA	96	%		1

IX-5-20210107 (202101070386)

Static ID: 537.1

Sampled on 01/07/2021 1325

EPA 537.1 - EPA Method 537.1

01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0054	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0028	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/07/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	13C2-PFDA	107	%		1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	13C2-PFHxA	106	%		1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	13C3-HFPO-DA	103	%		1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	d3-NMeFOSAA	121	%		1
01/09/21	01/11/21 20:56	1298553	1298913	(EPA 537.1)	d5-NEtFOSAA	100	%		1

IX-6-20210107 (202101070387)

Sampled on 01/07/2021 1328

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0067	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0020	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	13C2-PFDA	97	%		1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	13C2-PFHxA	99	%		1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	13C2-PFOA- IS#1	124	%		1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	13C3-HFPO-DA	90	%		1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	d3-NMeFOSAA	91	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/07/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/12/21	01/13/21 14:26	1298874	1299632	(EPA 537.1)	d5-NEtFOSAA	111	%		1
IX-7-20210107 (202101070388)						Sampled on 01/07/2021 1331			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0044	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0059	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	13C2-PFDA	106	%		1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	13C2-PFHxA	104	%		1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	d3-NMeFOSAA	121	%		1
01/09/21	01/11/21 21:15	1298553	1298913	(EPA 537.1)	d5-NEtFOSAA	100	%		1

IX-8-20210107 (202101070389)						Sampled on 01/07/2021 1334			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/07/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0069	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0025	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	13C2-PFDA	102	%		1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	13C2-PFHxA	105	%		1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	13C3-HFPO-DA	101	%		1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	d3-NMeFOSAA	122	%		1
01/09/21	01/11/21 21:25	1298553	1298913	(EPA 537.1)	d5-NEtFOSAA	95	%		1

MB-INF-20210107 (202101070390)

Sampled on 01/07/2021 1337

SM 5310C - Total Organic Carbon

01/15/21 19:53	1300376	(SM 5310C)	Total Organic Carbon	0.70	mg/L	0.20	1
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SM 5310C - Dissolved Organic Carbon

01/07/21 01/22/21 09:07	1298562	1301475	(SM 5310C)	Dissolved Organic Carbon	0.80	mg/L	0.20	1
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Rounding on totals after summation.
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1 800 566 LABS (1 800 566 5227)

Report: 911833
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

EPA Method 537.1

Prep Batch: 1298553 Analytical Batch: 1298913

202101070382	GAC-5-20210107
202101070383	GAC-6-20210107
202101070384	GAC-7-20210107
202101070385	GAC-8-20210107
202101070386	IX-5-20210107
202101070388	IX-7-20210107
202101070389	IX-8-20210107

Analysis Date: 01/11/2021

Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM

EPA Method 537.1

Prep Batch: 1298874 Analytical Batch: 1299632

202101070387	IX-6-20210107
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Analysis Date: 01/13/2021

Analyzed by: SZZ

Total Organic Carbon

Analytical Batch: 1300376

202101070390	MB-INF-20210107
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Analysis Date: 01/15/2021

Analyzed by: ZS6I

Dissolved Organic Carbon

Prep Batch: 1298562 Analytical Batch: 1301475

202101070390	MB-INF-20210107
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Analysis Date: 01/22/2021

Analyzed by: ZB2Z

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1298553 Analytical Batch: 1298913					Analysis Date: 01/11/2021				
DUP_202101070384	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0224	ug/L	95	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0229	ug/L	97	(70-130)	30	2.2
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00191	ug/L	102	(50-150)		
MS2_202101070383	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0452	ug/L	96	(70-130)		
DUP_202101070384	13C2-PFDA (S)			105	%	105	(70-130)		
LCS1	13C2-PFDA (S)		100	102	%	102	(70-130)		
LCS2	13C2-PFDA (S)		100	112	%	112	(70-130)		
MBLK	13C2-PFDA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	108	%	108	(70-130)		
MS2_202101070383	13C2-PFDA (S)		100	103	%	103	(70-130)		
DUP_202101070384	13C2-PFHxA (S)			107	%	107	(70-130)		
LCS1	13C2-PFHxA (S)		100	104	%	104	(70-130)		
LCS2	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MS2_202101070383	13C2-PFHxA (S)		100	105	%	105	(70-130)		
DUP_202101070384	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	107	(50-150)		
MS2_202101070383	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
DUP_202101070384	13C3-HFPO-DA (S)			105	%	105	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MBLK	13C3-HFPO-DA (S)			102	%	102	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
MS2_202101070383	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
DUP_202101070384	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	109	%	109	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			107	%	107	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202101070383	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
DUP_202101070384	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0242	ug/L	103	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0249	ug/L	106	(70-130)	30	2.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00195	ug/L	103	(50-150)		
MS2_202101070383	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0482	ug/L	99	(70-130)		
DUP_202101070384	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0243	ug/L	104	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0239	ug/L	102	(70-130)	30	1.7
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00190	ug/L	102	(50-150)		
MS2_202101070383	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0484	ug/L	104	(70-130)		
DUP_202101070384	d3-NMeFOSAA (I)			118	%	118	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	114	%	115	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	118	%	118	(50-150)		
MBLK	d3-NMeFOSAA (I)			119	%	119	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	115	%	115	(50-150)		
MS2_202101070383	d3-NMeFOSAA (I)		100	116	%	116	(50-150)		
DUP_202101070384	d5-NEtFOSAA (S)			97.3	%	97	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	94.7	%	95	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	98.7	%	99	(70-130)		
MBLK	d5-NEtFOSAA (S)			92.9	%	93	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MS2_202101070383	d5-NEtFOSAA (S)		100	94.7	%	95	(70-130)		
DUP_202101070384	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0252	ug/L	101	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0255	ug/L	102	(70-130)	30	1.2
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00196	ug/L	98	(50-150)		
MS2_202101070383	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0504	ug/L	101	(70-130)		
DUP_202101070384	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0233	ug/L	93	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0240	ug/L	96	(70-130)	30	3.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00187	ug/L	93	(50-150)		
MS2_202101070383	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0469	ug/L	94	(70-130)		
DUP_202101070384	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

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Report: 911833
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0240	ug/L	96	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0247	ug/L	99	(70-130)	30	2.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00190	ug/L	95	(50-150)		
MS2_202101070383	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0483	ug/L	97	(70-130)		
DUP_202101070384	Perfluorobutanesulfonic acid (PFBS)	0.011		0.0112	ug/L		(0-30)	30	2.1
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0224	ug/L	101	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0220	ug/L	100	(70-130)	30	1.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00181	ug/L	102	(50-150)		
MS2_202101070383	Perfluorobutanesulfonic acid (PFBS)	0.014	0.044	0.0582	ug/L	99	(70-130)		
DUP_202101070384	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0253	ug/L	101	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0262	ug/L	105	(70-130)	30	3.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00204	ug/L	102	(50-150)		
MS2_202101070383	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0505	ug/L	101	(70-130)		
DUP_202101070384	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0258	ug/L	103	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0271	ug/L	108	(70-130)	30	4.9
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00212	ug/L	106	(50-150)		
MS2_202101070383	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0514	ug/L	103	(70-130)		
DUP_202101070384	Perfluoroheptanoic acid (PFHpA)	0.0043		0.00438	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0256	ug/L	102	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0262	ug/L	105	(70-130)	30	2.3
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00204	ug/L	102	(50-150)		
MS2_202101070383	Perfluoroheptanoic acid (PFHpA)	0.0055	0.05	0.0570	ug/L	103	(70-130)		
DUP_202101070384	Perfluorohexanesulfonic acid (PFHxS)	0.0044		0.00440	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0231	ug/L	102	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0229	ug/L	100	(70-130)	30	0.87
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00185	ug/L	101	(50-150)		
MS2_202101070383	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0484	ug/L	102	(70-130)		
DUP_202101070384	Perfluorohexanoic acid (PFHxA)	0.0078		0.00780	ug/L		(0-30)	30	0.013
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0259	ug/L	104	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0262	ug/L	105	(70-130)	30	1.5

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 911833
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00200	ug/L	100	(50-150)		
MS2_202101070383	Perfluorohexanoic acid (PFHxA)	0.0094	0.05	0.0613	ug/L	104	(70-130)		
DUP_202101070384	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0259	ug/L	104	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0265	ug/L	106	(70-130)	30	2.3
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00201	ug/L	101	(50-150)		
MS2_202101070383	Perfluorononanoic acid (PFNA)	ND	0.05	0.0518	ug/L	103	(70-130)		
DUP_202101070384	Perfluorooctanesulfonic acid (PFOS)	0.0064		0.00642	ug/L		(0-30)	30	0.82
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0230	ug/L	100	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0232	ug/L	100	(70-130)	30	0.86
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00188	ug/L	101	(50-150)		
MS2_202101070383	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0475	ug/L	102	(70-130)		
DUP_202101070384	Perfluorooctanoic acid (PFOA)	0.012		0.0121	ug/L		(0-30)	30	2.1
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0265	ug/L	106	(70-130)	30	3.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00212	ug/L	106	(50-150)		
MS2_202101070383	Perfluorooctanoic acid (PFOA)	0.0043	0.05	0.0566	ug/L	105	(70-130)		
DUP_202101070384	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0287	ug/L	115	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0290	ug/L	116	(70-130)	30	1.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00251	ug/L	126	(50-150)		
MS2_202101070383	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0560	ug/L	111	(70-130)		
DUP_202101070384	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0248	ug/L	99	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0254	ug/L	101	(70-130)	30	2.4
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00199	ug/L	100	(50-150)		
MS2_202101070383	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0496	ug/L	99	(70-130)		
DUP_202101070384	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0256	ug/L	102	(70-130)	30	5.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00188	ug/L	94	(50-150)		

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202101070383	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0488	ug/L	98	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1298874 Analytical Batch: 1299632

Analysis Date: 01/13/2021

LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0423	ug/L	90	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0428	ug/L	91	(70-130)	30	1.2
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00170	ug/L	91	(50-150)		
MS2_202101120057	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0410	ug/L	87	(70-130)		
MSD2_202101120057	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0408	ug/L	87	(70-130)	30	0.59
LCS3	13C2-PFDA (S)		100	104	%	104	(70-130)		
LCS4	13C2-PFDA (S)		100	99.7	%	100	(70-130)		
MBLK	13C2-PFDA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	96.1	%	96	(70-130)		
MS2_202101120057	13C2-PFDA (S)		100	103	%	103	(70-130)		
MSD2_202101120057	13C2-PFDA (S)		100	100	%	100	(70-130)		
LCS3	13C2-PFHxA (S)		100	115	%	115	(70-130)		
LCS4	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			107	%	107	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MS2_202101120057	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MSD2_202101120057	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS3	13C2-PFOA- IS#1 (I)		100	111	%	111	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	115	%	115	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			116	%	116	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	116	%	116	(50-150)		
MS2_202101120057	13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
MSD2_202101120057	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
LCS3	13C3-HFPO-DA (S)		100	105	%	105	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	98.1	%	98	(70-130)		
MBLK	13C3-HFPO-DA (S)			99.3	%	99	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	97.9	%	98	(70-130)		
MS2_202101120057	13C3-HFPO-DA (S)		100	99.0	%	99	(70-130)		
MSD2_202101120057	13C3-HFPO-DA (S)		100	99.8	%	100	(70-130)		
LCS3	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			111	%	111	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202101120057	13C4-PFOS- IS#2 (I)		100	109	%	109	(50-150)		
MSD2_202101120057	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0437	ug/L	90	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0437	ug/L	90	(70-130)	30	0.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00191	ug/L	101	(50-150)		
MS2_202101120057	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0449	ug/L	93	(70-130)		
MSD2_202101120057	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0455	ug/L	94	(70-130)	30	1.4
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0436	ug/L	94	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0453	ug/L	97	(70-130)	30	3.8
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00183	ug/L	98	(50-150)		
MS2_202101120057	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0433	ug/L	93	(70-130)		
MSD2_202101120057	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0437	ug/L	94	(70-130)	30	0.98
LCS3	d3-NMeFOSAA (I)		100	97.0	%	97	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	96.2	%	96	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.4	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	97.1	%	97	(50-150)		
MS2_202101120057	d3-NMeFOSAA (I)		100	94.8	%	95	(50-150)		
MSD2_202101120057	d3-NMeFOSAA (I)		100	94.6	%	95	(50-150)		
LCS3	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		
MS2_202101120057	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MSD2_202101120057	d5-NEtFOSAA (S)		100	112	%	112	(70-130)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0441	ug/L	88	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0437	ug/L	87	(70-130)	30	0.91
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00190	ug/L	95	(50-150)		
MS2_202101120057	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0454	ug/L	91	(70-130)		
MSD2_202101120057	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0443	ug/L	89	(70-130)	30	2.6
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0482	ug/L	96	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0513	ug/L	103	(70-130)	30	6.2
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		
MS2_202101120057	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0507	ug/L	101	(70-130)		
MSD2_202101120057	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0509	ug/L	102	(70-130)	30	0.40

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0476	ug/L	95	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0510	ug/L	102	(70-130)	30	6.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00223	ug/L	112	(50-150)		
MS2_202101120057	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0515	ug/L	103	(70-130)		
MSD2_202101120057	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0486	ug/L	97	(70-130)	30	5.8
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0438	ug/L	99	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0436	ug/L	99	(70-130)	30	0.46
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00181	ug/L	102	(50-150)		
MS2_202101120057	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0420	ug/L	95	(70-130)		
MSD2_202101120057	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0429	ug/L	97	(70-130)	30	2.0
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0465	ug/L	93	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0453	ug/L	91	(70-130)	30	2.6
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00190	ug/L	95	(50-150)		
MS2_202101120057	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0467	ug/L	93	(70-130)		
MSD2_202101120057	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0460	ug/L	92	(70-130)	30	1.6
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0431	ug/L	86	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0449	ug/L	90	(70-130)	30	4.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00187	ug/L	94	(50-150)		
MS2_202101120057	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0442	ug/L	88	(70-130)		
MSD2_202101120057	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0444	ug/L	89	(70-130)	30	0.48
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0474	ug/L	95	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0466	ug/L	93	(70-130)	30	1.7
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00221	ug/L	111	(50-150)		
MS2_202101120057	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0487	ug/L	97	(70-130)		
MSD2_202101120057	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0481	ug/L	96	(70-130)	30	1.3
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0446	ug/L	98	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0458	ug/L	100	(70-130)	30	2.4
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00198	ug/L	109	(50-150)		
MS2_202101120057	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0446	ug/L	98	(70-130)		
MSD2_202101120057	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0453	ug/L	99	(70-130)	30	1.4
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0504	ug/L	101	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0506	ug/L	101	(70-130)	30	0.40

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00220	ug/L	110	(50-150)		
MS2_202101120057	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0502	ug/L	99	(70-130)		
MSD2_202101120057	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0503	ug/L	100	(70-130)	30	0.28
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0523	ug/L	105	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0532	ug/L	106	(70-130)	30	1.7
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00244	ug/L	122	(50-150)		
MS2_202101120057	Perfluorononanoic acid (PFNA)	ND	0.05	0.0554	ug/L	111	(70-130)		
MSD2_202101120057	Perfluorononanoic acid (PFNA)	ND	0.05	0.0539	ug/L	108	(70-130)	30	2.7
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0463	ug/L	100	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0477	ug/L	103	(70-130)	30	3.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00210	ug/L	113	(50-150)		
MS2_202101120057	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0472	ug/L	102	(70-130)		
MSD2_202101120057	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0459	ug/L	99	(70-130)	30	2.8
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0495	ug/L	99	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0502	ug/L	100	(70-130)	30	1.4
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00223	ug/L	112	(50-150)		
MS2_202101120057	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0522	ug/L	104	(70-130)		
MSD2_202101120057	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0514	ug/L	103	(70-130)	30	1.6
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0462	ug/L	92	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0469	ug/L	94	(70-130)	30	1.5
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00179	ug/L	90	(50-150)		
MS2_202101120057	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0490	ug/L	98	(70-130)		
MSD2_202101120057	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0463	ug/L	93	(70-130)	30	5.6
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0428	ug/L	86	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0436	ug/L	87	(70-130)	30	1.9
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00164	ug/L	82	(50-150)		
MS2_202101120057	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0450	ug/L	90	(70-130)		
MSD2_202101120057	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0425	ug/L	85	(70-130)	30	5.7
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0440	ug/L	88	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0433	ug/L	87	(70-130)	30	1.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00189	ug/L	95	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 911833
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202101120057	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0451	ug/L	90	(70-130)		
MSD2_202101120057	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0445	ug/L	89	(70-130)	30	1.4

Total Organic Carbon by SM 5310C

Analytical Batch: 1300376

Analysis Date: 01/15/2021

LCS1	Total Organic Carbon		5	5.37	mg/L	107	(90-110)		
LCS2	Total Organic Carbon		5	5.38	mg/L	108	(90-110)	20	0.19
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.232	mg/L	116	(50-150)		
MS_202101070276	Total Organic Carbon	ND	4	4.30	mg/L	105	(80-120)		
MS2_202101070622	Total Organic Carbon	ND	2	1.94	mg/L	91	(80-120)		
MSD_202101070276	Total Organic Carbon	ND	4	4.20	mg/L	102	(80-120)	20	2.4
MSD2_202101070622	Total Organic Carbon	ND	2	1.95	mg/L	92	(80-120)	20	0.77

Dissolved Organic Carbon by SM 5310C

Analytical Batch: 1301475

Analysis Date: 01/22/2021

LCS1	Dissolved Organic Carbon		5	5.48	mg/L	110	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.50	mg/L	110	(90-110)	20	0.36
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.234	mg/L	117	(50-150)		
MS_202101220040	Dissolved Organic Carbon	0.94	4	5.84	mg/L	<u>123</u>	(80-120)		
MSD_202101220040	Dissolved Organic Carbon	0.94	4	5.62	mg/L	117	(80-120)	20	3.8

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 7 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Fecal Coliform Small, Fecal Coliform Large), MPN/100 mL (Fecal Coliform), Presence/Absence (P/A)* (Fecal Coliform)

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 01/24/2021

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 01/24/2021

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

Colilert Report - Page 1 of 1



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 01/24/2021

Quant Report - Page 1 of 1

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750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
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1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 915470
Project: 0250000
Group: WRD Pilot [Set #1]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
 Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 915470
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **January 27, 2021 at 1524**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202101270689</u>	GAC-1-20210127	01/27/2021 1013
	@537.1	
<u>202101270690</u>	GAC-2-20210127	01/27/2021 1016
	@537.1	
<u>202101270691</u>	GAC-3-20210127	01/27/2021 1019
	@537.1	
<u>202101270692</u>	GAC-4-20210127	01/27/2021 1022
	@537.1	
<u>202101270694</u>	IX-1-20210127	01/27/2021 1025
	@537.1	
<u>202101270695</u>	IX-2-20210127	01/27/2021 1028
	@537.1	
<u>202101270696</u>	IX-3-20210127	01/27/2021 1031
	@537.1	
<u>202101270697</u>	IX-4-20210127	01/27/2021 1034
	@537.1	
<u>202101270698</u>	GAC-1M-20210127	01/27/2021 1037
	@537.1	
<u>202101270699</u>	GAC-2M-20210127	01/27/2021 1040
	@537.1	
<u>202101270700</u>	GAC-3M-20210127	01/27/2021 1043
	@537.1	
<u>202101270701</u>	GAC-4M-20210127	01/27/2021 1046
	@537.1	
<u>202101270702</u>	IX-1M-20210127	01/27/2021 1049
	@537.1	

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 915470
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **January 27, 2021 at 1524**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202101270703</u>	IX-2M-20210127	01/27/2021 1052
	@537.1	
<u>202101270704</u>	IX-3M-20210127	01/27/2021 1055
	@537.1	
<u>202101270705</u>	IX-4M-20210127	01/27/2021 1058
	@537.1	
<u>202101270710</u>	LH-INF-20210127	01/27/2021 1101
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Calcium Total ICAP
	Chloride	Hexavalent chromium(Dissolved)
	Iron Total ICAP	Manganese Total ICAP/MS
	Oil and Grease by 1664(subbed)	Potassium Total ICAP
	Sodium Total ICAP	Total Dissolved Solid (TDS)
	Total Hardness as CaCO3 by ICP	Total Suspended Solids (TSS)
	Uranium by ICPMS as pCi/L	Uranium ICAP/MS
<u>202101270711</u>	IX-5-20210127	01/27/2021 1213
	@537.1	
<u>202101270712</u>	IX-6-20210127	01/27/2021 1216
	@537.1	
<u>202101270713</u>	IX-7-20210127	01/27/2021 1219
	@537.1	
<u>202101270714</u>	IX-8-20210127	01/27/2021 1222
	@537.1	
<u>202101270715</u>	GAC-5-20210127	01/27/2021 1225
	@537.1	
<u>202101270716</u>	GAC-6-20210127	01/27/2021 1228
	@537.1	
<u>202101270717</u>	GAC-7-20210127	01/27/2021 1231

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 915470
Project: 0250000
Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **January 27, 2021 at 1524**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202101270718	GAC-8-20210127	01/27/2021 1234
	@537.1	
202101270720	MB-INF-20210127	01/27/2021 1301
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Dissolved Organic Carbon
	Iron Total ICAP	Magnesium Total ICAP
	Oil and Grease by 1664(subbed)	Perchlorate
	Sodium Total ICAP	Sulfate
	Total Hardness as CaCO3 by ICP	Total Organic Carbon
	Uranium by ICPMS as pCi/L	Uranium ICAP/MS
		Calcium Total ICAP
		Hexavalent chromium(Dissolved)
		Manganese Total ICAP/MS
		Potassium Total ICAP
		Total Dissolved Solid (TDS)
		Total Suspended Solids (TSS)

Test Description

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

@VOASDWA -- Volatile Organics by GCMS



915470

FROM: GSI Environmental Inc.
19200 Von Karman Ave, Suite 800
Irvine, CA 92612
(949) 679-1070

PROJECT NAME: WRD Pilot

PROJECT CONTACT: Miae Jeon

GLOBAL ID:

PROJECT NO.: 5302

LAB CONTACT: Sophia Liang

TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com

LABORATORY: Eurofins Eaton Analytical

SAMPLER(S): (PRINT) RDT

TURNAROUND TIME:
 SAME DAY
 24 HR
 48 HR
 72 HR
 5 DAYS
 STANDARD

SPECIAL INSTRUCTIONS:
 Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com,
 & rdtorres@gsi-net.com;
 Provide EDD of sample results

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION		FFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)	DOC	
		DATE	TIME			Unpreserved	Preserved															
	GAC-1-20210127	1-27-21	1013	Water	2		2	X														
	GAC-2-20210127		1016	Water	1			X														
	GAC-3-20210127		1019	Water				X														
	GAC-4-20210127		1022	Water				X														
	IX-1-20210127		1025	Water				X														
	IX-2-20210127		1028	Water				X														
	IX-3-20210127		1031	Water				X														
	IX-4-20210127		1034	Water				X														
	GAC-1M-20210127		1037	Water				X														
	GAC-2M-20210127		1040	Water				X														
	GAC-3M-20210127		1043	Water				X														
	GAC-4M-20210127		1046	Water				X														
	IX-1M-20210127		1049	Water				X														
	IX-2M-20210127		1052	Water				X														
	IX-3M-20210127		1055	Water				X														
	IX-4M-20210127		1058	Water				X														
	LH-INF-20210127		1101	Water	15		5 10	X														

Received by: (Signature) *Chuck Baucher* Date: 1-27-21 Time: 1524

Relinquished by: (Signature) *Robert Torres*

Relinquished by: (Signature)

Relinquished by: (Signature)



915476

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302																
TEL: (949) 679-1070		E-MAIL: mjeon@gsi-net.com		LAB CONTACT: Sophia Liang																
LABORATORY: Eurofins Eaton Analytical		GLOBAL ID:		SAMPLER(S): (PRINT) <u>RDT</u>																
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results		REQUESTED ANALYSES Please check box or fill in blank as needed.																
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)	
		DATE	TIME																	
	IX-5 - 20210127	1-27	1213	Water	2	2	X													
	IX-6 - 20210127		1216	Water			X													
	IX-7 - 20210127		1219	Water			X													
	IX-8 - 20210127		1222	Water			X													
	GAC-5 - 20210127		1225	Water			X													
	GAC-6 - 20210127		1228	Water			X													
	GAC-7 - 20210127		1231	Water			X													
	GAC-8 - 20210127		1234	Water			X													
	IX-5M - 20210127		1237	Water			X													
	IX-6M - 20210127		1240	Water			X													
	IX-7M - 20210127		1243	Water			X													
	IX-8M - 20210127		1246	Water			X													
	GAC-5M - 20210127		1249	Water			X													
	GAC-6M - 20210127		1252	Water			X													
	GAC-7M - 20210127		1255	Water			X													
	GAC-8M - 20210127		1258	Water			X													
	MB-INF - 20210127		1301	Water	15	5 10	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Relinquished by: (Signature) <u>Robert Torres</u>		Received by: (Signature) <u>Michelle Galar</u>		Date: <u>1-27-21</u>		Time: <u>1524</u>														
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:														
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:														



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 915470

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616 (Observation = 13.6 °C) (Corr. Factor = -0.2 °C) (Final = 13.4 °C)

TYPE OF ICE: Real Synthetic No Ice Condition of Ice: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA and Radon Headspace: _____

No Samples with Headspace:

Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm
0270	5						
0270	7						

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
	<u>Chuck Broecker</u>	<u>Chuck Broecker</u>	Eurofins Eaton Analytical	<u>1.27.21</u>	<u>1524</u>

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 915470
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove, CAELAP 2944 exp 9-30-2021

Flags Legend:

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202101270694				
		<u>IX-1-20210127</u>				
01/29/2021 22:48	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
01/29/2021 22:48	Perfluorooctanoic acid (PFOA)		0.0029		ug/L	0.0020
		202101270695				
		<u>IX-2-20210127</u>				
01/29/2021 21:51	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
		202101270696				
		<u>IX-3-20210127</u>				
01/29/2021 22:58	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
01/29/2021 22:58	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
01/29/2021 22:58	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
		202101270697				
		<u>IX-4-20210127</u>				
01/29/2021 23:08	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
		202101270698				
		<u>GAC-1M-20210127</u>				
01/29/2021 23:17	Perfluorobutanesulfonic acid (PFBS)		0.0047		ug/L	0.0020
01/29/2021 23:17	Perfluorohexanesulfonic acid (PFHxS)		0.0022		ug/L	0.0020
01/29/2021 23:17	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
01/29/2021 23:17	Perfluorooctanesulfonic acid (PFOS)		0.0050		ug/L	0.0020
01/29/2021 23:17	Perfluorooctanoic acid (PFOA)		0.0060		ug/L	0.0020
		202101270699				
		<u>GAC-2M-20210127</u>				
01/29/2021 23:38	Perfluorobutanesulfonic acid (PFBS)		0.0049		ug/L	0.0020
01/29/2021 23:38	Perfluorohexanoic acid (PFHxA)		0.0030		ug/L	0.0020
		202101270700				
		<u>GAC-3M-20210127</u>				
01/29/2021 23:48	Perfluorobutanesulfonic acid (PFBS)		0.0052		ug/L	0.0020
01/29/2021 23:48	Perfluorohexanesulfonic acid (PFHxS)		0.0029		ug/L	0.0020
01/29/2021 23:48	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
01/29/2021 23:48	Perfluorooctanesulfonic acid (PFOS)		0.0048		ug/L	0.0020
01/29/2021 23:48	Perfluorooctanoic acid (PFOA)		0.0064		ug/L	0.0020
		202101270701				
		<u>GAC-4M-20210127</u>				
01/29/2021 23:58	Perfluorooctanesulfonic acid (PFOS)		0.0022		ug/L	0.0020
01/29/2021 23:58	Perfluorooctanoic acid (PFOA)		0.0020		ug/L	0.0020
		202101270702				
		<u>IX-1M-20210127</u>				
01/30/2021 00:08	Perfluorohexanoic acid (PFHxA)		0.0027		ug/L	0.0020
01/30/2021 00:08	Perfluorooctanesulfonic acid (PFOS)		0.0044		ug/L	0.0020
01/30/2021 00:08	Perfluorooctanoic acid (PFOA)		0.0064		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

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 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202101270703 <u>IX-2M-20210127</u>						
01/30/2021 00:17	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
01/30/2021 00:17	Perfluorooctanoic acid (PFOA)		0.0081		ug/L	0.0020
202101270704 <u>IX-3M-20210127</u>						
01/30/2021 00:27	Perfluorobutanesulfonic acid (PFBS)		0.0026		ug/L	0.0020
01/30/2021 00:27	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
01/30/2021 00:27	Perfluorooctanoic acid (PFOA)		0.0076		ug/L	0.0020
202101270705 <u>IX-4M-20210127</u>						
01/30/2021 00:36	Perfluorobutanesulfonic acid (PFBS)		0.0038		ug/L	0.0020
01/30/2021 00:36	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
01/30/2021 00:36	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
01/30/2021 00:36	Perfluorooctanesulfonic acid (PFOS)		0.0033		ug/L	0.0020
01/30/2021 00:36	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
202101270710 <u>LH-INF-20210127</u>						
01/30/2021 00:36	Alkalinity in CaCO3 units		200		mg/L	2.0
02/03/2021 19:57	Arsenic Total ICAP/MS		2.8	10	ug/L	1.0
01/28/2021 20:40	Calcium Total ICAP		110		mg/L	1.0
01/28/2021 03:24	Chloride		110	250	mg/L	2.5
02/08/2021 15:47	Chloroform (Trichloromethane)		0.77		ug/L	0.50
01/29/2021 12:58	Dissolved Organic Carbon		0.64		mg/L	0.20
01/30/2021 17:49	Hexavalent chromium(Dissolved)		0.80		ug/L	0.020
01/28/2021 20:40	Magnesium Total ICAP		21		mg/L	0.10
01/28/2021 03:24	Nitrate as Nitrogen by IC		2.9	10	mg/L	0.50
01/28/2021 03:24	Nitrate as NO3 (calc)		13	45	mg/L	2.2
02/02/2021 10:33	Oil and Grease by 1664(subbed)		2.52		mg/L	0.971
01/30/2021 00:46	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
01/30/2021 00:46	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
01/30/2021 00:46	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
01/30/2021 00:46	Perfluorononanoic acid (PFNA)		0.0028		ug/L	0.0020
01/30/2021 00:46	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
01/30/2021 00:46	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
01/28/2021 20:40	Potassium Total ICAP		4.7		mg/L	1.0
01/28/2021 20:40	Sodium Total ICAP		70		mg/L	1.0
01/28/2021 03:24	Sulfate		170	250	mg/L	2.5
02/02/2021 01:43	Total Dissolved Solids (TDS)		640	500	mg/L	10
01/28/2021 21:23	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0

SUMMARY OF POSITIVE DATA ONLY

Water Replenishment District
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Samples Received on:
 01/27/2021 1524

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
01/28/2021 03:24	Total Nitrate, Nitrite-N, CALC		2.9		mg/L	0.10
01/30/2021 02:15	Total Organic Carbon		1.6		mg/L	0.20
02/08/2021 15:47	Total THM		0.77	80	ug/L	0.50
02/01/2021 17:14	Uranium by ICPMS as pCi/L		3.4		pCi/L	0.70
01/30/2021 03:42	Uranium ICAP/MS		5.1	30	ug/L	1.0
		202101270711 IX-5-20210127				
01/30/2021 00:55	Perfluorohexanoic acid (PFHxA)		0.0054		ug/L	0.0020
01/30/2021 00:55	Perfluorooctanoic acid (PFOA)		0.0026		ug/L	0.0020
		202101270712 IX-6-20210127				
01/30/2021 01:05	Perfluoroheptanoic acid (PFHpA)		0.0034		ug/L	0.0020
01/30/2021 01:05	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
01/30/2021 01:05	Perfluorooctanoic acid (PFOA)		0.0025		ug/L	0.0020
		202101270713 IX-7-20210127				
01/29/2021 19:11	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
01/29/2021 19:11	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
01/29/2021 19:11	Perfluorooctanoic acid (PFOA)		0.0065		ug/L	0.0020
		202101270714 IX-8-20210127				
01/29/2021 20:09	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
01/29/2021 20:09	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
01/29/2021 20:09	Perfluorooctanoic acid (PFOA)		0.0028		ug/L	0.0020
		202101270715 GAC-5-20210127				
01/29/2021 20:18	Perfluorobutanesulfonic acid (PFBS)		0.0094		ug/L	0.0020
01/29/2021 20:18	Perfluoroheptanoic acid (PFHpA)		0.0030		ug/L	0.0020
01/29/2021 20:18	Perfluorohexanesulfonic acid (PFHxS)		0.0028		ug/L	0.0020
01/29/2021 20:18	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
01/29/2021 20:18	Perfluorooctanesulfonic acid (PFOS)		0.0069		ug/L	0.0020
01/29/2021 20:18	Perfluorooctanoic acid (PFOA)		0.0094		ug/L	0.0020
		202101270716 GAC-6-20210127				
01/29/2021 20:28	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
01/29/2021 20:28	Perfluoroheptanoic acid (PFHpA)		0.0050		ug/L	0.0020
01/29/2021 20:28	Perfluorohexanesulfonic acid (PFHxS)		0.0027		ug/L	0.0020
01/29/2021 20:28	Perfluorohexanoic acid (PFHxA)		0.0078		ug/L	0.0020
01/29/2021 20:28	Perfluorooctanoic acid (PFOA)		0.0070		ug/L	0.0020
		202101270717 GAC-7-20210127				

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 Group: WRD Pilot [Set #1]

Water Replenishment District
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 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
01/29/2021 20:38	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
01/29/2021 20:38	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
01/29/2021 20:38	Perfluorohexanesulfonic acid (PFHxS)		0.0045		ug/L	0.0020
01/29/2021 20:38	Perfluorohexanoic acid (PFHxA)		0.0072		ug/L	0.0020
01/29/2021 20:38	Perfluorooctanesulfonic acid (PFOS)		0.0074		ug/L	0.0020
01/29/2021 20:38	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		202101270718	<u>GAC-8-20210127</u>			
01/29/2021 20:47	Perfluorobutanesulfonic acid (PFBS)		0.0074		ug/L	0.0020
01/29/2021 20:47	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
01/29/2021 20:47	Perfluorohexanoic acid (PFHxA)		0.0056		ug/L	0.0020
01/29/2021 20:47	Perfluorooctanesulfonic acid (PFOS)		0.0025		ug/L	0.0020
01/29/2021 20:47	Perfluorooctanoic acid (PFOA)		0.0044		ug/L	0.0020
		202101270720	<u>MB-INF-20210127</u>			
01/30/2021 00:28	Alkalinity in CaCO3 units		160		mg/L	2.0
02/03/2021 20:00	Arsenic Total ICAP/MS		1.3	10	ug/L	1.0
01/28/2021 20:41	Calcium Total ICAP		63		mg/L	1.0
01/28/2021 04:03	Chloride		50	250	mg/L	2.5
01/29/2021 13:20	Dissolved Organic Carbon		0.74		mg/L	0.20
02/01/2021 11:54	Hexavalent chromium(Dissolved)		0.47		ug/L	0.020
01/28/2021 20:41	Magnesium Total ICAP		12		mg/L	0.10
01/28/2021 04:03	Nitrate as Nitrogen by IC		2.5	10	mg/L	0.50
01/28/2021 04:03	Nitrate as NO3 (calc)		11	45	mg/L	2.2
02/02/2021 10:33	Oil and Grease by 1664(subbed)		2.33		mg/L	0.973
01/29/2021 20:57	Perfluorobutanesulfonic acid (PFBS)		0.0090		ug/L	0.0020
01/29/2021 20:57	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
01/29/2021 20:57	Perfluoroheptanoic acid (PFHpA)		0.0038		ug/L	0.0020
01/29/2021 20:57	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
01/29/2021 20:57	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
01/29/2021 20:57	Perfluorononanoic acid (PFNA)		0.0038		ug/L	0.0020
01/29/2021 20:57	Perfluorooctanesulfonic acid (PFOS)		0.042		ug/L	0.0020
01/29/2021 20:57	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
01/28/2021 20:41	Potassium Total ICAP		3.8		mg/L	1.0
01/28/2021 20:41	Sodium Total ICAP		52		mg/L	1.0
01/28/2021 04:03	Sulfate		74	250	mg/L	2.5
02/02/2021 01:44	Total Dissolved Solids (TDS)		390	500	mg/L	10
01/28/2021 21:23	Total Hardness as CaCO3 by ICP (calc)		210		mg/L	3.0

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Report: 915470
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
01/28/2021 04:03	Total Nitrate, Nitrite-N, CALC		2.5		mg/L	0.10
01/30/2021 02:33	Total Organic Carbon		1.3		mg/L	0.20
02/01/2021 17:14	Uranium by ICPMS as pCi/L		1.2		pCi/L	0.70
01/30/2021 03:45	Uranium ICAP/MS		1.8	30	ug/L	1.0

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Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20210127 (202101270689)					Sampled on 01/27/2021 1013				
EPA 537.1 - EPA Method 537.1									
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	13C2-PFDA	108	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	13C2-PFHxA	101	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	103	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	103	%		1
01/28/21	01/29/21 21:32	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	102	%		1

GAC-2-20210127 (202101270690)					Sampled on 01/27/2021 1016				
EPA 537.1 - EPA Method 537.1									
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	13C2-PFHxA	104	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	102	%		1
01/28/21	01/29/21 22:20	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	103	%		1

GAC-3-20210127 (202101270691)

Sampled on 01/27/2021 1019

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	13C2-PFHxA	104	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	99	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	105	%		1
01/28/21	01/29/21 22:29	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	104	%		1

GAC-4-20210127 (202101270692)

Sampled on 01/27/2021 1022

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	13C2-PFHxA	100	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	99	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/29/21 22:39	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	103	%		1

IX-1-20210127 (202101270694)

Sampled on 01/27/2021 1025

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0029	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	13C2-PFDA	108	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	13C2-PFHxA	103	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	104	%		1
01/28/21	01/29/21 22:48	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	102	%		1

IX-2-20210127 (202101270695)

Sampled on 01/27/2021 1028

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	13C2-PFDA	107	%		1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	13C2-PFHxA	102	%		1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	103	%		1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	104	%		1

Rounding on totals after summation.
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Report: 915470
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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 21:51	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	101	%		1
IX-3-20210127 (202101270696)						Sampled on 01/27/2021 1031			
EPA 537.1 - EPA Method 537.1									
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	13C2-PFDA	109	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	13C2-PFHxA	103	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	104	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	102	%		1
01/28/21	01/29/21 22:58	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	105	%		1

IX-4-20210127 (202101270697)

Sampled on 01/27/2021 1034

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	13C2-PFDA	107	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	13C2-PFHxA	105	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	105	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/29/21 23:08	1302976	1303616	(EPA 537.1)	d5-NETFOSAA	105	%		1

GAC-1M-20210127 (202101270698)

Sampled on 01/27/2021 1037

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0047	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0022	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0050	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0060	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	13C2-PFDA	109	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	13C2-PFHxA	103	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	105	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	102	%		1
01/28/21	01/29/21 23:17	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	102	%		1

GAC-2M-20210127 (202101270699)

Sampled on 01/27/2021 1040

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0049	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0030	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	13C2-PFDA	109	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	13C2-PFHxA	106	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	104	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	99	%		1
01/28/21	01/29/21 23:38	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	106	%		1

GAC-3M-20210127 (202101270700)

Sampled on 01/27/2021 1043

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0052	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0029	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0048	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0064	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	13C2-PFHxA	103	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	98	%		1
01/28/21	01/29/21 23:48	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	103	%		1

GAC-4M-20210127 (202101270701)

Sampled on 01/27/2021 1046

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0022	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0020	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	13C2-PFDA	107	%		1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	13C2-PFHxA	104	%		1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	100	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 23:58	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	102	%		1
IX-1M-20210127 (202101270702)						Sampled on 01/27/2021 1049			
EPA 537.1 - EPA Method 537.1									
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0027	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0044	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0064	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	13C2-PFDA	109	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	13C2-PFHxA	106	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	106	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/30/21 00:08	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-2M-20210127 (202101270703)

Sampled on 01/27/2021 1052

EPA 537.1 - EPA Method 537.1

01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0081	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	13C2-PFDA	106	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	13C2-PFHxA	105	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	103	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/30/21 00:17	1302976	1303616	(EPA 537.1)	d5-NETFOSAA	101	%		1

IX-3M-20210127 (202101270704)

Sampled on 01/27/2021 1055

EPA 537.1 - EPA Method 537.1

01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0026	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0076	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	13C2-PFDA	106	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	13C2-PFHxA	102	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	102	%		1
01/28/21	01/30/21 00:27	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	101	%		1

IX-4M-20210127 (202101270705)

Sampled on 01/27/2021 1058

EPA 537.1 - EPA Method 537.1

01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0038	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1

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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0033	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	13C2-PFDA	108	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	13C2-PFHxA	105	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	96	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	103	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/30/21 00:36	1302976	1303616	(EPA 537.1)	d5-NEFOSAA	99	%		1

LH-INF-20210127 (202101270710)

Sampled on 01/27/2021 1101

EPA 200.8 - ICPMS Metals

01/28/21	02/03/21 19:57	1302892	1303730	(EPA 200.8)	Arsenic Total ICAP/MS	2.8	ug/L	1.0	1
01/28/21	01/30/21 03:42	1302892	1303402	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
01/28/21	01/30/21 03:42	1302892	1303402	(EPA 200.8)	Uranium ICAP/MS	5.1	ug/L	1.0	1

EPA 200.7 - ICP Metals

01/28/21	01/28/21 20:40	1302892	1303072	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
01/28/21	01/28/21 20:40	1302892	1303072	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
01/28/21	01/28/21 20:40	1302892	1303072	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
01/28/21	01/28/21 20:40	1302892	1303072	(EPA 200.7)	Potassium Total ICAP	4.7	mg/L	1.0	1
01/28/21	01/28/21 20:40	1302892	1303072	(EPA 200.7)	Sodium Total ICAP	70	mg/L	1.0	1

SM 5310C - Total Organic Carbon

	01/30/21 02:15		1303339	(SM 5310C)	Total Organic Carbon	1.6	mg/L	0.20	1
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SM 5310C - Dissolved Organic Carbon

01/28/21	01/29/21 12:58	1303048	1303125	(SM 5310C)	Dissolved Organic Carbon	0.64	mg/L	0.20	1
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EPA 200.8 - Uranium by ICPMS as pCi/L

	02/01/21 17:14			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.4 (c)	pCi/L	0.70	1
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SM 2340B - Total Hardness as CaCO3 by ICP

	01/28/21 21:23			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
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EPA 218.6 - Hexavalent chromium(Dissolved)

	01/30/21 17:49		1303463	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.80	ug/L	0.020	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

	01/28/21 03:24		1302710	(EPA 300.0)	Nitrate as Nitrogen by IC	2.9	mg/L	0.50	5
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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	01/28/21 03:24		1302710	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
	01/28/21 03:24		1302710	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	01/28/21 03:24		1302710	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.9	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	01/28/21 03:24		1302704	(EPA 300.0)	Chloride	110	mg/L	2.5	5
	01/28/21 03:24		1302704	(EPA 300.0)	Sulfate	170	mg/L	2.5	5
EPA 314.0 - Perchlorate									
	02/03/21 18:11	(1)	1304461	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0028	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	13C2-PFDA	113	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	13C2-PFHxA	105	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	102	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	103	%		1
01/28/21	01/30/21 00:46	1302976	1303616	(EPA 537.1)	d5-NetFOSAA	99	%		1

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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 1664 - Oil and Grease by 1664(subbed)									
	02/02/21 10:33			(EPA 1664)	Oil and Grease by 1664(subbed)	2.52	mg/L	0.971	1
EPA 524.2 - Volatile Organics by GCMS									
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Chloroform (Trichloromethane)	0.77	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1

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Report: 915470
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Water Replenishment District
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 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Dichloromethane	ND (LM)	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Total THM	0.77	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	1,2-Dichloroethane-d4	106	%		1
02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	4-Bromofluorobenzene	100	%		1

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 01/27/2021 1524

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02/08/21	02/08/21 15:47	1305651	1305666	(EPA 524.2)	Toluene-d8	94	%		1
SM 2320B - Alkalinity in CaCO3 units									
	01/30/21 00:36		1303355	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
02/01/21	02/02/21 01:43	1303653	1303724	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	640	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	02/03/21 00:15		1304063	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1
<u>IX-5-20210127 (202101270711)</u>					Sampled on 01/27/2021 1213				
EPA 537.1 - EPA Method 537.1									
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0054	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0026	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	13C2-PFHxA	103	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	98	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	101	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	103	%		1
01/28/21	01/30/21 00:55	1302976	1303616	(EPA 537.1)	d5-NetFOSAA	96	%		1

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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
IX-6-20210127 (202101270712)					Sampled on 01/27/2021 1216				
EPA 537.1 - EPA Method 537.1									
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0034	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0025	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	13C2-PFHxA	101	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	13C3-HFPO-DA	99	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	d3-NMeFOSAA	101	%		1
01/28/21	01/30/21 01:05	1302976	1303616	(EPA 537.1)	d5-NEtFOSAA	99	%		1

IX-7-20210127 (202101270713)					Sampled on 01/27/2021 1219				
EPA 537.1 - EPA Method 537.1									
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0065	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	13C2-PFDA	99	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	13C2-PFHxA	94	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	93	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	116	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	106	%		1
01/28/21	01/29/21 19:11	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	111	%		1

IX-8-20210127 (202101270714)

Sampled on 01/27/2021 1222

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0028	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	13C2-PFDA	105	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	13C2-PFHxA	109	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	106	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	120	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	109	%		1
01/28/21	01/29/21 20:09	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	124	%		1

GAC-5-20210127 (202101270715)

Sampled on 01/27/2021 1225

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0094	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0030	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0028	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0069	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0094	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	13C2-PFDA	117	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	13C2-PFHxA	110	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	127	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	98	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	117	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	108	%		1
01/28/21	01/29/21 20:18	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	120	%		1

GAC-6-20210127 (202101270716)

Sampled on 01/27/2021 1228

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0050	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0027	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0078	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0070	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	13C2-PFDA	95	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	13C2-PFHxA	102	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	99	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	113	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	106	%		1
01/28/21	01/29/21 20:28	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	108	%		1

GAC-7-20210127 (202101270717)

Sampled on 01/27/2021 1231

EPA 537.1 - EPA Method 537.1

01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0045	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0072	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0074	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	13C2-PFDA	106	%		1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	13C2-PFHxA	104	%		1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	98	%		1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	117	%		1
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	105	%		1

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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 20:38	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	110	%		1
GAC-8-20210127 (202101270718)						Sampled on 01/27/2021 1234			
EPA 537.1 - EPA Method 537.1									
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0074	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0056	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0025	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0044	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	13C2-PFDA	104	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	13C2-PFHxA	108	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	115	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	101	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	116	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	106	%		1
01/28/21	01/29/21 20:47	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	113	%		1

MB-INF-20210127 (202101270720)

Sampled on 01/27/2021 1301

EPA 200.8 - ICPMS Metals

01/28/21	02/03/21 20:00	1302892	1303730	(EPA 200.8)	Arsenic Total ICAP/MS	1.3	ug/L	1.0	1
01/28/21	01/30/21 03:45	1302892	1303402	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
01/28/21	01/30/21 03:45	1302892	1303402	(EPA 200.8)	Uranium ICAP/MS	1.8	ug/L	1.0	1

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Water Replenishment District
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 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 200.7 - ICP Metals									
01/28/21	01/28/21 20:41	1302892	1303072	(EPA 200.7)	Calcium Total ICAP	63	mg/L	1.0	1
01/28/21	01/28/21 20:41	1302892	1303072	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.020	1
01/28/21	01/28/21 20:41	1302892	1303072	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1
01/28/21	01/28/21 20:41	1302892	1303072	(EPA 200.7)	Potassium Total ICAP	3.8	mg/L	1.0	1
01/28/21	01/28/21 20:41	1302892	1303072	(EPA 200.7)	Sodium Total ICAP	52	mg/L	1.0	1
SM 5310C - Total Organic Carbon									
	01/30/21 02:33		1303339	(SM 5310C)	Total Organic Carbon	1.3	mg/L	0.20	1
SM 5310C - Dissolved Organic Carbon									
01/28/21	01/29/21 13:20	1303048	1303125	(SM 5310C)	Dissolved Organic Carbon	0.74	mg/L	0.20	1
EPA 200.8 - Uranium by ICPMS as pCi/L									
	02/01/21 17:14			(EPA 200.8)	Uranium by ICPMS as pCi/L	1.2 (c)	pCi/L	0.70	1
SM 2340B - Total Hardness as CaCO3 by ICP									
	01/28/21 21:23			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	210 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
	02/01/21 11:54		1303644	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.47	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	01/28/21 04:03		1302710	(EPA 300.0)	Nitrate as Nitrogen by IC	2.5	mg/L	0.50	5
	01/28/21 04:03		1302710	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
	01/28/21 04:03		1302710	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	01/28/21 04:03		1302710	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.5	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	01/28/21 04:03		1302704	(EPA 300.0)	Chloride	50	mg/L	2.5	5
	01/28/21 04:03		1302704	(EPA 300.0)	Sulfate	74	mg/L	2.5	5
EPA 314.0 - Perchlorate									
	02/03/21 18:36	(1)	1304461	(EPA 314.0)	Perchlorate	ND	ug/L	4.0	1
EPA 537.1 - EPA Method 537.1									
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0090	ug/L	0.0020	1

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Water Replenishment District
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 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0038	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0038	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.042	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	13C2-PFDA	102	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	13C2-PFHxA	100	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	13C3-HFPO-DA	100	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	13C4-PFOS- IS#2	117	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	d3-NMeFOSAA	113	%		1
01/28/21	01/29/21 20:57	1302979	1303604	(EPA 537.1)	d5-NEtFOSAA	106	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	02/02/21 10:33			(EPA 1664)	Oil and Grease by 1664(subbed)	2.33	mg/L	0.973	1
EPA 524.2 - Volatile Organics by GCMS									
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1

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Samples Received on:
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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Dichloromethane	ND (LM)	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 01/27/2021 1524

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	1,2-Dichloroethane-d4	105	%		1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	4-Bromofluorobenzene	96	%		1
02/08/21	02/08/21 16:09	1305651	1305666	(EPA 524.2)	Toluene-d8	94	%		1
SM 2320B - Alkalinity in CaCO3 units									
	01/30/21 00:28		1303355	(SM 2320B)	Alkalinity in CaCO3 units	160	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
02/01/21	02/02/21 01:44	1303653	1303724	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	390	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	02/03/21 00:18		1304063	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

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Report: 915470
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1302704

202101270710 LH-INF-20210127
 202101270720 MB-INF-20210127

Analysis Date: 01/28/2021

Analyzed by: HL7J
 Analyzed by: HL7J

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1302710

202101270710 LH-INF-20210127
 202101270720 MB-INF-20210127

Analysis Date: 01/28/2021

Analyzed by: HL7J
 Analyzed by: HL7J

ICP Metals

Prep Batch: 1302892 Analytical Batch: 1303072

202101270710 LH-INF-20210127
 202101270720 MB-INF-20210127

Analysis Date: 01/28/2021

Analyzed by: Y7TT
 Analyzed by: Y7TT

Dissolved Organic Carbon

Prep Batch: 1303048 Analytical Batch: 1303125

202101270710 LH-INF-20210127
 202101270720 MB-INF-20210127

Analysis Date: 01/29/2021

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

Total Organic Carbon

Analytical Batch: 1303339

202101270710 LH-INF-20210127
 202101270720 MB-INF-20210127

Analysis Date: 01/30/2021

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

Alkalinity in CaCO3 units

Analytical Batch: 1303355

202101270710 LH-INF-20210127
 202101270720 MB-INF-20210127

Analysis Date: 01/30/2021

Analyzed by: ZS6I
 Analyzed by: ZS6I

ICPMS Metals

Prep Batch: 1302892 Analytical Batch: 1303402

202101270710 LH-INF-20210127
 202101270720 MB-INF-20210127

Analysis Date: 01/30/2021

Analyzed by: AZS
 Analyzed by: AZS

Hexavalent chromium(Dissolved)

Analytical Batch: 1303463

202101270710 LH-INF-20210127

Analysis Date: 01/30/2021

Analyzed by: TLH

EPA Method 537.1

Prep Batch: 1302979 Analytical Batch: 1303604

202101270713 IX-7-20210127
 202101270714 IX-8-20210127
 202101270715 GAC-5-20210127
 202101270716 GAC-6-20210127
 202101270717 GAC-7-20210127
 202101270718 GAC-8-20210127
 202101270720 MB-INF-20210127

Analysis Date: 01/29/2021

Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ
 Analyzed by: SZZ

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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

EPA Method 537.1

Prep Batch: 1302976 Analytical Batch: 1303616

Analysis Date: 01/29/2021

202101270689	GAC-1-20210127	Analyzed by: KAM
202101270690	GAC-2-20210127	Analyzed by: KAM
202101270691	GAC-3-20210127	Analyzed by: KAM
202101270692	GAC-4-20210127	Analyzed by: KAM
202101270694	IX-1-20210127	Analyzed by: KAM
202101270695	IX-2-20210127	Analyzed by: KAM
202101270696	IX-3-20210127	Analyzed by: KAM
202101270697	IX-4-20210127	Analyzed by: KAM
202101270698	GAC-1M-20210127	Analyzed by: KAM
202101270699	GAC-2M-20210127	Analyzed by: KAM
202101270700	GAC-3M-20210127	Analyzed by: KAM
202101270701	GAC-4M-20210127	Analyzed by: KAM
202101270702	IX-1M-20210127	Analyzed by: KAM
202101270703	IX-2M-20210127	Analyzed by: KAM
202101270704	IX-3M-20210127	Analyzed by: KAM
202101270705	IX-4M-20210127	Analyzed by: KAM
202101270710	LH-INF-20210127	Analyzed by: KAM
202101270711	IX-5-20210127	Analyzed by: KAM
202101270712	IX-6-20210127	Analyzed by: KAM

Hexavalent chromium(Dissolved)

Analytical Batch: 1303644

Analysis Date: 02/01/2021

202101270720	MB-INF-20210127	Analyzed by: TLH
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Total Dissolved Solids (TDS)

Prep Batch: 1303653 Analytical Batch: 1303724

Analysis Date: 02/02/2021

202101270710	LH-INF-20210127	Analyzed by: TJ52
202101270720	MB-INF-20210127	Analyzed by: TJ52

ICPMS Metals

Prep Batch: 1302892 Analytical Batch: 1303730

Analysis Date: 02/03/2021

202101270710	LH-INF-20210127	Analyzed by: AZS
202101270720	MB-INF-20210127	Analyzed by: AZS

Total Suspended Solids (TSS)

Analytical Batch: 1304063

Analysis Date: 02/03/2021

202101270710	LH-INF-20210127	Analyzed by: TJ52
202101270720	MB-INF-20210127	Analyzed by: TJ52

Perchlorate

Analytical Batch: 1304461

Analysis Date: 02/03/2021

202101270710	LH-INF-20210127	Analyzed by: H5VG
202101270720	MB-INF-20210127	Analyzed by: H5VG

Volatile Organics by GCMS

Prep Batch: 1305651 Analytical Batch: 1305666

Analysis Date: 02/08/2021

202101270710	LH-INF-20210127	Analyzed by: FX5E
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Eaton Analytical

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Laboratory QC Summary

Report: 915470
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

202101270720

MB-INF-20210127

Analyzed by: FX5E

Tel: (626) 386-1100
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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1302704					Analysis Date: 01/28/2021				
LCS1	Chloride		25	26.0	mg/L	104	(90-110)		
LCS2	Chloride		25	26.1	mg/L	104	(90-110)	20	0.38
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.454	mg/L	91	(50-150)		
MS_202101270710	Chloride	110	65	173	mg/L	106	(80-120)		
MSD_202101270710	Chloride	110	65	173	mg/L	106	(80-120)	20	0.080
LCS1	Sulfate		50	51.3	mg/L	103	(90-110)		
LCS2	Sulfate		50	51.6	mg/L	103	(90-110)	20	0.58
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.986	mg/L	99	(50-150)		
MRLLW	Sulfate		0.25	0.228	mg/L	91	(50-150)		
MS_202101270710	Sulfate	170	125	301	mg/L	107	(80-120)		
MSD_202101270710	Sulfate	170	125	301	mg/L	107	(80-120)	20	0.060
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1302710					Analysis Date: 01/28/2021				
LCS1	Nitrate as Nitrogen by IC		2.5	2.48	mg/L	99	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.48	mg/L	99	(90-110)	20	0.0
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0479	mg/L	96	(50-150)		
MS_202101270710	Nitrate as Nitrogen by IC	2.9	6.5	9.41	mg/L	105	(80-120)		
MSD_202101270710	Nitrate as Nitrogen by IC	2.9	6.5	9.42	mg/L	105	(80-120)	20	0.078
LCS1	Nitrite Nitrogen by IC		1	0.999	mg/L	100	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.00	mg/L	100	(90-110)	20	0.10
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0503	mg/L	101	(50-150)		
MS_202101270710	Nitrite Nitrogen by IC	ND	2.5	2.50	mg/L	100	(80-120)		
MSD_202101270710	Nitrite Nitrogen by IC	ND	2.5	2.52	mg/L	101	(80-120)	20	0.76
ICP Metals by EPA 200.7									
Analytical Batch: 1303072					Analysis Date: 01/28/2021				
LCS1	Calcium Total ICAP		50	54.2	mg/L	108	(85-115)		
LCS2	Calcium Total ICAP		50	53.7	mg/L	107	(85-115)	20	0.93
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.02	mg/L	102	(50-150)		
MS_202101270418	Calcium Total ICAP	8.2	50	59.8	mg/L	103	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202101270423	Calcium Total ICAP	28	50	78.3	mg/L	101	(70-130)		
MSD_202101270418	Calcium Total ICAP	8.2	50	60.1	mg/L	104	(70-130)	20	0.49
MSD2_202101270423	Calcium Total ICAP	28	50	78.2	mg/L	101	(70-130)	20	0.18
LCS1	Iron Total ICAP		5	5.38	mg/L	108	(85-115)		
LCS2	Iron Total ICAP		5	5.36	mg/L	107	(85-115)	20	0.56
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.02	0.0210	mg/L	105	(50-150)		
MS_202101270418	Iron Total ICAP	ND	5	5.20	mg/L	104	(70-130)		
MS2_202101270423	Iron Total ICAP	ND	5	5.24	mg/L	105	(70-130)		
MSD_202101270418	Iron Total ICAP	ND	5	5.24	mg/L	105	(70-130)	20	0.65
MSD2_202101270423	Iron Total ICAP	ND	5	5.24	mg/L	105	(70-130)	20	0.037
LCS1	Magnesium Total ICAP		20	21.2	mg/L	106	(85-115)		
LCS2	Magnesium Total ICAP		20	21.0	mg/L	105	(85-115)	20	0.47
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0976	mg/L	98	(50-150)		
MS_202101270418	Magnesium Total ICAP	1.6	20	22.2	mg/L	103	(70-130)		
MS2_202101270423	Magnesium Total ICAP	23	20	42.8	mg/L	100	(70-130)		
MSD_202101270418	Magnesium Total ICAP	1.6	20	22.4	mg/L	104	(70-130)	20	0.71
MSD2_202101270423	Magnesium Total ICAP	23	20	42.7	mg/L	99	(70-130)	20	0.25
LCS1	Potassium Total ICAP		20	21.2	mg/L	106	(85-115)		
LCS2	Potassium Total ICAP		20	21.0	mg/L	105	(85-115)	20	0.95
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.620	mg/L	62	(50-150)		
MS_202101270418	Potassium Total ICAP	1.6	20	22.8	mg/L	106	(70-130)		
MS2_202101270423	Potassium Total ICAP	2.4	20	24.5	mg/L	111	(70-130)		
MSD_202101270418	Potassium Total ICAP	1.6	20	23.0	mg/L	107	(70-130)	20	1
MSD2_202101270423	Potassium Total ICAP	2.4	20	24.5	mg/L	110	(70-130)	20	0.18
LCS1	Sodium Total ICAP		50	53.1	mg/L	106	(85-115)		
LCS2	Sodium Total ICAP		50	52.8	mg/L	106	(85-115)	20	0.57
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	1.20	mg/L	120	(50-150)		
MS_202101270418	Sodium Total ICAP	3.3	50	53.5	mg/L	100	(70-130)		
MS2_202101270423	Sodium Total ICAP	40	50	88.4	mg/L	96	(70-130)		
MSD_202101270418	Sodium Total ICAP	3.3	50	54.1	mg/L	101	(70-130)	20	1.1
MSD2_202101270423	Sodium Total ICAP	40	50	87.6	mg/L	95	(70-130)	20	0.91

Dissolved Organic Carbon by SM 5310C

Analytical Batch: 1303125

Analysis Date: 01/29/2021

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Dissolved Organic Carbon		5	5.32	mg/L	106	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.36	mg/L	107	(90-110)	20	0.75
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.218	mg/L	109	(50-150)		
MS_202102010043	Dissolved Organic Carbon	3.7	4	7.90	mg/L	106	(80-120)		
MSD_202102010043	Dissolved Organic Carbon	3.7	4	7.90	mg/L	106	(80-120)	20	0.0

Total Organic Carbon by SM 5310C

Analytical Batch: 1303339

Analysis Date: 01/29/2021

LCS1	Total Organic Carbon		5	5.15	mg/L	103	(90-110)		
LCS2	Total Organic Carbon		5	5.15	mg/L	103	(90-110)	20	0.0
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.273	mg/L	137	(50-150)		
MS_202101280121	Total Organic Carbon	0.28	4	4.37	mg/L	102	(80-120)		
MS2_202101280141	Total Organic Carbon	0.79	2	2.88	mg/L	105	(80-120)		
MSD_202101280121	Total Organic Carbon	0.28	4	4.46	mg/L	105	(80-120)	20	2.1
MSD2_202101280141	Total Organic Carbon	0.79	2	2.91	mg/L	106	(80-120)	20	0.90

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1303355

Analysis Date: 01/29/2021

LCS1	Alkalinity in CaCO3 units		100	98.0	mg/L	98	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	98.6	mg/L	99	(90-110)	20	0.61
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.17	mg/L	109	(50-150)		
MS_202102020854	Alkalinity in CaCO3 units	95	100	189	mg/L	94	(80-120)		
MS_202101090058	Alkalinity in CaCO3 units	4.4	100	112	mg/L	108	(80-120)		
MSD_202102020854	Alkalinity in CaCO3 units	95	100	165	mg/L	<u>70</u>	(80-120)	20	14
MSD_202101090058	Alkalinity in CaCO3 units	4.4	100	112	mg/L	108	(80-120)	20	0.17

ICPMS Metals by EPA 200.8

Analytical Batch: 1303402

Analysis Date: 01/30/2021

LCS1	Arsenic Total ICAP/MS		50	51.0	ug/L	102	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	49.4	ug/L	99	(85-115)	20	3.2
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.842	ug/L	84	(50-150)		
MS_202101260081	Arsenic Total ICAP/MS	1.4	50	53.5	ug/L	104	(70-130)		
MS2_202012220205	Arsenic Total ICAP/MS	ND	50	57.1	ug/L	114	(70-130)		
MSD_202101260081	Arsenic Total ICAP/MS	1.4	50	58.8	ug/L	115	(70-130)	20	9.4
MSD2_202012220205	Arsenic Total ICAP/MS	ND	50	58.2	ug/L	116	(70-130)	20	1.9

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Manganese Total ICAP/MS		100	105	ug/L	105	(85-115)		
LCS2	Manganese Total ICAP/MS		100	106	ug/L	106	(85-115)	20	0.95
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.05	ug/L	102	(50-150)		
MS_202101260081	Manganese Total ICAP/MS	6.6	100	110	ug/L	103	(70-130)		
MS2_202012220205	Manganese Total ICAP/MS	ND	100	109	ug/L	109	(70-130)		
MSD_202101260081	Manganese Total ICAP/MS	6.6	100	119	ug/L	113	(70-130)	20	7.9
MSD2_202012220205	Manganese Total ICAP/MS	ND	100	114	ug/L	113	(70-130)	20	4.2
LCS1	Uranium ICAP/MS		50	49.7	ug/L	100	(85-115)		
LCS2	Uranium ICAP/MS		50	48.3	ug/L	97	(85-115)	20	2.9
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.984	ug/L	98	(50-150)		
MS_202101260081	Uranium ICAP/MS	3.3	50	57.9	ug/L	109	(70-130)		
MS2_202012220205	Uranium ICAP/MS	6.1	50	58.0	ug/L	104	(70-130)		
MSD_202101260081	Uranium ICAP/MS	3.3	50	56.6	ug/L	107	(70-130)	20	2.2
MSD2_202012220205	Uranium ICAP/MS	6.1	50	60.8	ug/L	109	(70-130)	20	4.7

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1303463

Analysis Date: 01/30/2021

LCS1	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.97	ug/L	99	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0198	ug/L	99	(50-150)		
MS_202101280098	Hexavalent chromium(Dissolved)	1.0	2	3.18	ug/L	108	(90-110)		
MS_202101300112	Hexavalent chromium(Dissolved)	0.028	2	2.14	ug/L	105	(90-110)		
MSD_202101280098	Hexavalent chromium(Dissolved)	1.0	2	3.18	ug/L	108	(90-110)	20	0.082
MSD_202101300112	Hexavalent chromium(Dissolved)	0.028	2	2.13	ug/L	105	(90-110)	20	0.26

EPA Method 537.1 by EPA 537.1

Prep Batch: 1302979 Analytical Batch: 1303604

Analysis Date: 01/29/2021

DUP_202101280099	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0416	ug/L	88	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0414	ug/L	88	(70-130)	30	0.48
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00154	ug/L	82	(50-150)		
MS1_202101270713	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0197	ug/L	84	(70-130)		
DUP_202101280099	13C2-PFDA (S)			102	%	102	(70-130)		
LCS3	13C2-PFDA (S)		100	99.9	%	100	(70-130)		
LCS4	13C2-PFDA (S)		100	102	%	102	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C2-PFDA (S)			104	%	105	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	97.2	%	97	(70-130)		
MS1_202101270713	13C2-PFDA (S)		100	91.6	%	92	(70-130)		
DUP_202101280099	13C2-PFHxA (S)			107	%	107	(70-130)		
LCS3	13C2-PFHxA (S)		100	106	%	106	(70-130)		
LCS4	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MS1_202101270713	13C2-PFHxA (S)		100	87.8	%	88	(70-130)		
DUP_202101280099	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			110	%	110	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	113	%	113	(50-150)		
MS1_202101270713	13C2-PFOA- IS#1 (I)		100	127	%	127	(50-150)		
DUP_202101280099	13C3-HFPO-DA (S)			100	%	100	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MBLK	13C3-HFPO-DA (S)			99.8	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	99.7	%	100	(70-130)		
MS1_202101270713	13C3-HFPO-DA (S)		100	85.9	%	86	(70-130)		
DUP_202101280099	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	107	%	107	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			114	%	114	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	110	%	111	(50-150)		
MS1_202101270713	13C4-PFOS- IS#2 (I)		100	117	%	117	(50-150)		
DUP_202101280099	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0465	ug/L	96	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0454	ug/L	94	(70-130)	30	2.4
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00188	ug/L	100	(50-150)		
MS1_202101270713	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0210	ug/L	89	(70-130)		
DUP_202101280099	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0451	ug/L	97	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0445	ug/L	96	(70-130)	30	1.3
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00181	ug/L	97	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202101270713	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0222	ug/L	95	(70-130)		
DUP_202101280099	d3-NMeFOSAA (I)			106	%	107	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	97.7	%	98	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	96.0	%	96	(50-150)		
MBLK	d3-NMeFOSAA (I)			104	%	104	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MS1_202101270713	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
DUP_202101280099	d5-NEtFOSAA (S)			105	%	105	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	111	%	111	(70-130)		
MBLK	d5-NEtFOSAA (S)			110	%	110	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	105	%	105	(70-130)		
MS1_202101270713	d5-NEtFOSAA (S)		100	96.0	%	96	(70-130)		
DUP_202101280099	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0473	ug/L	95	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0460	ug/L	92	(70-130)	30	2.8
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00182	ug/L	91	(50-150)		
MS1_202101270713	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0217	ug/L	87	(70-130)		
DUP_202101280099	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0509	ug/L	102	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0530	ug/L	106	(70-130)	30	4.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00213	ug/L	107	(50-150)		
MS1_202101270713	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0259	ug/L	104	(70-130)		
DUP_202101280099	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0492	ug/L	99	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0495	ug/L	99	(70-130)	30	0.61
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00205	ug/L	102	(50-150)		
MS1_202101270713	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0257	ug/L	103	(70-130)		
DUP_202101280099	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0433	ug/L	98	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0435	ug/L	98	(70-130)	30	0.46
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00182	ug/L	103	(50-150)		
MS1_202101270713	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0227	ug/L	101	(70-130)		
DUP_202101280099	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0458	ug/L	92	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0460	ug/L	92	(70-130)	30	0.44
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00181	ug/L	91	(50-150)		
MS1_202101270713	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0238	ug/L	95	(70-130)		
DUP_202101280099	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0451	ug/L	90	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0459	ug/L	92	(70-130)	30	1.8
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00177	ug/L	89	(50-150)		
MS1_202101270713	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0208	ug/L	83	(70-130)		
DUP_202101280099	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0492	ug/L	99	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0488	ug/L	98	(70-130)	30	1.0
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00213	ug/L	107	(50-150)		
MS1_202101270713	Perfluoroheptanoic acid (PFHpA)	0.0040	0.025	0.0260	ug/L	88	(70-130)		
DUP_202101280099	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0449	ug/L	99	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0449	ug/L	99	(70-130)	30	0.0
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00192	ug/L	106	(50-150)		
MS1_202101270713	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0229	ug/L	101	(70-130)		
DUP_202101280099	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0506	ug/L	101	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0485	ug/L	97	(70-130)	30	4.2
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00212	ug/L	106	(50-150)		
MS1_202101270713	Perfluorohexanoic acid (PFHxA)	0.0063	0.025	0.0285	ug/L	89	(70-130)		
DUP_202101280099	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0508	ug/L	102	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0490	ug/L	98	(70-130)	30	3.6
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00213	ug/L	107	(50-150)		
MS1_202101270713	Perfluorononanoic acid (PFNA)	ND	0.025	0.0240	ug/L	95	(70-130)		
DUP_202101280099	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0458	ug/L	99	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0456	ug/L	99	(70-130)	30	0.44

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00213	ug/L	115	(50-150)		
MS1_202101270713	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0236	ug/L	102	(70-130)		
DUP_202101280099	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0506	ug/L	101	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0504	ug/L	101	(70-130)	30	0.40
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00210	ug/L	105	(50-150)		
MS1_202101270713	Perfluorooctanoic acid (PFOA)	0.0065	0.025	0.0324	ug/L	104	(70-130)		
DUP_202101280099	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0462	ug/L	92	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0467	ug/L	94	(70-130)	30	1.1
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00181	ug/L	91	(50-150)		
MS1_202101270713	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0214	ug/L	85	(70-130)		
DUP_202101280099	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0455	ug/L	91	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0444	ug/L	89	(70-130)	30	2.5
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00167	ug/L	84	(50-150)		
MS1_202101270713	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0203	ug/L	81	(70-130)		
DUP_202101280099	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0492	ug/L	98	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0479	ug/L	96	(70-130)	30	2.7
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00190	ug/L	95	(50-150)		
MS1_202101270713	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0227	ug/L	91	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1302976 Analytical Batch: 1303616

Analysis Date: 01/29/2021

DUP_202101270695	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0236	ug/L	100	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0240	ug/L	102	(70-130)	30	1.7
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00199	ug/L	106	(50-150)		
MS_202101270689	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00190	ug/L	101	(50-150)		
DUP_202101270695	13C2-PFDA (S)			106	%	106	(70-130)		
LCS1	13C2-PFDA (S)		100	108	%	108	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	13C2-PFDA (S)		100	108	%	108	(70-130)		
MBLK	13C2-PFDA (S)			112	%	113	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	107	%	107	(70-130)		
MS_202101270689	13C2-PFDA (S)		100	104	%	104	(70-130)		
DUP_202101270695	13C2-PFHxA (S)			103	%	103	(70-130)		
LCS1	13C2-PFHxA (S)		100	104	%	104	(70-130)		
LCS2	13C2-PFHxA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFHxA (S)			109	%	109	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	102	%	102	(70-130)		
MS_202101270689	13C2-PFHxA (S)		100	103	%	103	(70-130)		
DUP_202101270695	13C2-PFOA- IS#1 (I)			102	%	103	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	99.6	%	100	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			101	%	101	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MS_202101270689	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202101270695	13C3-HFPO-DA (S)			102	%	102	(70-130)		
LCS1	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
MBLK	13C3-HFPO-DA (S)			107	%	107	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	99.9	%	100	(70-130)		
MS_202101270689	13C3-HFPO-DA (S)		100	99.5	%	100	(70-130)		
DUP_202101270695	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	97.7	%	98	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	99.4	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	99.4	%	99	(50-150)		
MS_202101270689	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
DUP_202101270695	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0243	ug/L	103	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0246	ug/L	104	(70-130)	30	1.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00193	ug/L	102	(50-150)		
MS_202101270689	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00194	ug/L	103	(50-150)		
DUP_202101270695	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0252	ug/L	108	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0254	ug/L	109	(70-130)	30	0.79
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00202	ug/L	108	(50-150)		
MS_202101270689	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00195	ug/L	105	(50-150)		
DUP_202101270695	d3-NMeFOSAA (I)			104	%	104	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	103	%	103	(50-150)		
MBLK	d3-NMeFOSAA (I)			99.1	%	99	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MS_202101270689	d3-NMeFOSAA (I)		100	104	%	104	(50-150)		
DUP_202101270695	d5-NEtFOSAA (S)			100	%	100	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	98.6	%	99	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.5	%	97	(70-130)		
MBLK	d5-NEtFOSAA (S)			105	%	105	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	102	%	102	(70-130)		
MS_202101270689	d5-NEtFOSAA (S)		100	98.1	%	98	(70-130)		
DUP_202101270695	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0249	ug/L	100	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0253	ug/L	101	(70-130)	30	1.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202101270689	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00194	ug/L	97	(50-150)		
DUP_202101270695	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0250	ug/L	100	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0253	ug/L	101	(70-130)	30	1.2
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00199	ug/L	100	(50-150)		
MS_202101270689	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00201	ug/L	100	(50-150)		
DUP_202101270695	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0254	ug/L	102	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0259	ug/L	104	(70-130)	30	2.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00204	ug/L	102	(50-150)		
MS_202101270689	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00204	ug/L	102	(50-150)		
DUP_202101270695	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0226	ug/L	102	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0229	ug/L	103	(70-130)	30	1.3
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00191	ug/L	108	(50-150)		
MS_202101270689	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00240	ug/L	99	(50-150)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202101270695	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0269	ug/L	108	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0271	ug/L	108	(70-130)	30	0.74
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00216	ug/L	108	(50-150)		
MS_202101270689	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00212	ug/L	101	(50-150)		
DUP_202101270695	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0257	ug/L	103	(70-130)	30	0.0
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00209	ug/L	104	(50-150)		
MS_202101270689	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00201	ug/L	98	(50-150)		
DUP_202101270695	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0263	ug/L	105	(70-130)	30	0.76
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00211	ug/L	106	(50-150)		
MS_202101270689	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00217	ug/L	102	(50-150)		
DUP_202101270695	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0245	ug/L	107	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0247	ug/L	108	(70-130)	30	0.81
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00193	ug/L	106	(50-150)		
MS_202101270689	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00194	ug/L	106	(50-150)		
DUP_202101270695	Perfluorohexanoic acid (PFHxA)	0.0038		0.00392	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0260	ug/L	104	(70-130)	30	1.9
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00205	ug/L	102	(50-150)		
MS_202101270689	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00286	ug/L	94	(50-150)		
DUP_202101270695	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0265	ug/L	106	(70-130)	30	1.9
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00213	ug/L	107	(50-150)		
MS_202101270689	Perfluorononanoic acid (PFNA)	ND	0.002	0.00212	ug/L	103	(50-150)		
DUP_202101270695	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0245	ug/L	106	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0248	ug/L	107	(70-130)	30	1.6
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00213	ug/L	115	(50-150)		
MS_202101270689	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00209	ug/L	104	(50-150)		
DUP_202101270695	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0258	ug/L	103	(70-130)	30	0.77
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00220	ug/L	110	(50-150)		
MS_202101270689	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00237	ug/L	102	(50-150)		
DUP_202101270695	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0274	ug/L	110	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0279	ug/L	111	(70-130)	30	1.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00280	ug/L	140	(50-150)		
MS_202101270689	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00269	ug/L	105	(50-150)		
DUP_202101270695	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0257	ug/L	103	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0261	ug/L	104	(70-130)	30	1.5
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202101270689	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00207	ug/L	104	(50-150)		
DUP_202101270695	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0254	ug/L	101	(70-130)	30	1.6
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00204	ug/L	102	(50-150)		
MS_202101270689	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00200	ug/L	100	(50-150)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1303644

Analysis Date: 02/01/2021

LCS1	Hexavalent chromium(Dissolved)		2	1.98	ug/L	99	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.98	ug/L	99	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0165	ug/L	83	(50-150)		
MS_202102010133	Hexavalent chromium(Dissolved)	0.031	2	2.12	ug/L	104	(90-110)		
MSD_202102010133	Hexavalent chromium(Dissolved)	0.031	2	2.12	ug/L	104	(90-110)	20	0.057

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Total Dissolved Solids (TDS) by E160.1/SM2540C									
Analytical Batch: 1303724					Analysis Date: 02/02/2021				
DUP_202101270292	Total Dissolved Solid (TDS)	250		236	mg/L		(0-10)	10	4.1
DUP_202101270387	Total Dissolved Solid (TDS)	340		342	mg/L		(0-10)	10	0.0
LCS1	Total Dissolved Solid (TDS)		175	180	mg/L	103	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	704	mg/L	101	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	12.0	mg/L	120	(50-150)		
ICPMS Metals by EPA 200.8									
Analytical Batch: 1303730					Analysis Date: 02/03/2021				
LCS1	Arsenic Total ICAP/MS		50	47.9	ug/L	96	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.0	ug/L	96	(85-115)	20	0.21
MBLK	Arsenic Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.665	ug/L	67	(50-150)		
MS_202101270369	Arsenic Total ICAP/MS	ND	50	44.3	ug/L	89	(70-130)		
MS2_202101280163	Arsenic Total ICAP/MS	2.2	50	50.3	ug/L	96	(70-130)		
MSD_202101270369	Arsenic Total ICAP/MS	ND	50	46.7	ug/L	93	(70-130)	20	5.3
MSD2_202101280163	Arsenic Total ICAP/MS	2.2	50	44.0	ug/L	84	(70-130)	20	13
LCS1	Manganese Total ICAP/MS		100	100	ug/L	101	(85-115)		
LCS2	Manganese Total ICAP/MS		100	100	ug/L	100	(85-115)	20	1
MBLK	Manganese Total ICAP/MS			<1	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.04	ug/L	102	(50-150)		
MS_202101270369	Manganese Total ICAP/MS	3.5	100	95.5	ug/L	96	(70-130)		
MS2_202101280163	Manganese Total ICAP/MS	ND	100	97.3	ug/L	96	(70-130)		
MSD_202101270369	Manganese Total ICAP/MS	3.5	100	98.7	ug/L	99	(70-130)	20	3.3
MSD2_202101280163	Manganese Total ICAP/MS	ND	100	84.6	ug/L	83	(70-130)	20	14
LCS1	Uranium ICAP/MS		50	52.6	ug/L	105	(85-115)		
LCS2	Uranium ICAP/MS		50	52.0	ug/L	104	(85-115)	20	1.1
MBLK	Uranium ICAP/MS			<0.5	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.954	ug/L	95	(50-150)		
MS_202101270369	Uranium ICAP/MS	ND	50	47.2	ug/L	94	(70-130)		
MS2_202101280163	Uranium ICAP/MS	14	50	71.2	ug/L	114	(70-130)		
MSD_202101270369	Uranium ICAP/MS	ND	50	49.4	ug/L	99	(70-130)	20	4.5
MSD2_202101280163	Uranium ICAP/MS	14	50	59.0	ug/L	89	(70-130)	20	19
Total Suspended Solids (TSS) by SM 2540D									
Analytical Batch: 1304063					Analysis Date: 02/03/2021				

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202012230126	Total Suspended Solids (TSS)	64		64.0	mg/L		(0-10)	10	0.0
DUP_202012230145	Total Suspended Solids (TSS)	270		254	mg/L		(0-10)	10	6.8
LCS1	Total Suspended Solids (TSS)		175	168	mg/L	96	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	172	mg/L	98	(71-107)	20	2.4
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	8.00	mg/L	80	(50-150)		

Perchlorate by EPA 314.0

Analytical Batch: 1304461

Analysis Date: 02/03/2021

LCS1	Perchlorate		25	24.1	ug/L	96	(85-115)		
LCS2	Perchlorate		25	23.5	ug/L	94	(85-115)	15	2.5
MBLK	Perchlorate			<2	ug/L				
MRL_CHK	Perchlorate		4	3.87	ug/L	97	(75-125)		
MS_202101270668	Perchlorate	ND	25	27.0	ug/L	108	(80-120)		
MSD_202101270668	Perchlorate	ND	25	26.8	ug/L	107	(80-120)	15	0.78

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1305666

Analysis Date: 02/08/2021

LCS1	1,1,1,2-Tetrachloroethane		5	4.99	ug/L	100	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.53	ug/L	91	(70-130)	20	9.7
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.62	ug/L	92	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.32	ug/L	86	(70-130)	20	6.7
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.09	ug/L	102	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.56	ug/L	91	(70-130)	20	11
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.94	ug/L	99	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.80	ug/L	96	(70-130)	20	2.9
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,1-Dichloroethane		5	4.92	ug/L	98	(70-130)		
LCS2	1,1-Dichloroethane		5	4.36	ug/L	87	(70-130)	20	12
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.44	ug/L	89	(70-130)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	1,1-Dichloroethylene		5	4.00	ug/L	80	(70-130)	20	10
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1-Dichloropropene		5	4.84	ug/L	97	(70-130)		
LCS2	1,1-Dichloropropene		5	4.25	ug/L	85	(70-130)	20	13
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.73	ug/L	95	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	4.64	ug/L	93	(70-130)	20	1.9
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.750	ug/L	150	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.25	ug/L	105	(70-130)		
LCS2	1,2,3-Trichloropropane		5	4.62	ug/L	92	(70-130)	20	13
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.610	ug/L	122	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.78	ug/L	96	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.70	ug/L	94	(70-130)	20	1.7
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.660	ug/L	132	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.74	ug/L	95	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.40	ug/L	88	(70-130)	20	7.4
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.550	ug/L	110	(50-150)		
LCS1	1,2-Dichloroethane		5	5.41	ug/L	108	(70-130)		
LCS2	1,2-Dichloroethane		5	5.23	ug/L	105	(70-130)	20	3.4
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	104	%	104	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			111	%	111	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	106	%	106	(70-130)		
LCS1	1,2-Dichloropropane		5	4.95	ug/L	99	(70-130)		
LCS2	1,2-Dichloropropane		5	4.84	ug/L	97	(70-130)	20	2.3
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.72	ug/L	94	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.43	ug/L	89	(70-130)	20	6.3

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,3-Dichloropropane		5	5.21	ug/L	104	(70-130)		
LCS2	1,3-Dichloropropane		5	4.78	ug/L	96	(70-130)	20	8.6
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.550	ug/L	110	(50-150)		
LCS1	2,2-Dichloropropane		5	4.92	ug/L	98	(70-130)		
LCS2	2,2-Dichloropropane		5	4.53	ug/L	91	(70-130)	20	8.3
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.640	ug/L	128	(50-150)		
LCS1	2-Butanone (MEK)		50	55.8	ug/L	112	(70-130)		
LCS2	2-Butanone (MEK)		50	50.3	ug/L	101	(70-130)	20	10
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	4.28	ug/L	86	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	98.0	%	98	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	93.8	%	94	(70-130)		
MBLK	4-Bromofluorobenzene (S)			91.8	%	92	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	105	%	105	(70-130)		
MRL_W	4-Bromofluorobenzene (S)		5	97.6	%	98	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	55.3	ug/L	111	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	49.4	ug/L	99	(70-130)	20	11
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	5.08	ug/L	102	(50-150)		
LCS1	Benzene		5	4.93	ug/L	99	(70-130)		
LCS2	Benzene		5	4.51	ug/L	90	(70-130)	20	8.9
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.560	ug/L	112	(50-150)		
LCS1	Bromobenzene		5	4.91	ug/L	98	(70-130)		
LCS2	Bromobenzene		5	4.38	ug/L	88	(70-130)	20	11
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.570	ug/L	114	(50-150)		
LCS1	Bromochloromethane		5	5.18	ug/L	104	(70-130)		
LCS2	Bromochloromethane		5	4.48	ug/L	90	(70-130)	20	15
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.570	ug/L	114	(50-150)		
LCS1	Bromodichloromethane		5	4.99	ug/L	100	(70-130)		
LCS2	Bromodichloromethane		5	4.68	ug/L	94	(70-130)	20	6.4
MBLK	Bromodichloromethane			<0.5	ug/L				

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Report: 915470
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Bromodichloromethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	Bromoethane		5	4.77	ug/L	95	(70-130)		
LCS2	Bromoethane		5	4.29	ug/L	86	(70-130)	20	11
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Bromoform		5	4.41	ug/L	88	(70-130)		
LCS2	Bromoform		5	4.19	ug/L	84	(70-130)	20	5.1
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.670	ug/L	134	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.07	ug/L	101	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	4.82	ug/L	96	(70-130)	20	5.1
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.650	ug/L	130	(50-150)		
LCS1	Carbon disulfide		5	4.05	ug/L	81	(70-130)		
LCS2	Carbon disulfide		5	3.60	ug/L	72	(70-130)	20	12
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.570	ug/L	114	(50-150)		
LCS1	Carbon Tetrachloride		5	4.94	ug/L	99	(70-130)		
LCS2	Carbon Tetrachloride		5	4.46	ug/L	89	(70-130)	20	10
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.480	ug/L	96	(50-150)		
LCS1	Chlorobenzene		5	4.92	ug/L	98	(70-130)		
LCS2	Chlorobenzene		5	4.50	ug/L	90	(70-130)	20	8.9
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Chlorodibromomethane		5	5.06	ug/L	101	(70-130)		
LCS2	Chlorodibromomethane		5	4.38	ug/L	88	(70-130)	20	14
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Chloroethane		5	4.50	ug/L	90	(70-130)		
LCS2	Chloroethane		5	3.89	ug/L	78	(70-130)	20	15
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.550	ug/L	110	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	5.13	ug/L	103	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.60	ug/L	92	(70-130)	20	11
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.44	ug/L	89	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Chloromethane(Methyl Chloride)		5	3.89	ug/L	78	(70-130)	20	13
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.390	ug/L	78	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.89	ug/L	98	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.31	ug/L	86	(70-130)	20	13
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.530	ug/L	106	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.56	ug/L	91	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.41	ug/L	88	(70-130)	20	3.3
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.670	ug/L	134	(50-150)		
LCS1	Dibromomethane		5	5.18	ug/L	104	(70-130)		
LCS2	Dibromomethane		5	4.83	ug/L	97	(70-130)	20	7.0
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.74	ug/L	95	(70-130)		
LCS2	Dichlorodifluoromethane		5	4.35	ug/L	87	(70-130)	20	8.6
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	Dichloromethane		5	4.93	ug/L	99	(70-130)		
LCS2	Dichloromethane		5	4.60	ug/L	92	(70-130)	20	6.9
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.760	ug/L	<u>152</u>	(50-150)		
LCS1	Di-isopropyl ether		5	5.01	ug/L	100	(70-130)		
LCS2	Di-isopropyl ether		5	4.54	ug/L	91	(70-130)	20	9.8
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.570	ug/L	114	(50-150)		
LCS1	Ethyl benzene		5	4.97	ug/L	99	(70-130)		
LCS2	Ethyl benzene		5	4.55	ug/L	91	(70-130)	20	8.8
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Hexachlorobutadiene		5	4.44	ug/L	89	(70-130)		
LCS2	Hexachlorobutadiene		5	4.58	ug/L	92	(70-130)	20	3.1
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.630	ug/L	126	(50-150)		
LCS1	Isopropylbenzene		5	4.65	ug/L	93	(70-130)		
LCS2	Isopropylbenzene		5	4.34	ug/L	87	(70-130)	20	6.9
MBLK	Isopropylbenzene			<0.5	ug/L				

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Isopropylbenzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	m,p-Xylenes		10	9.68	ug/L	97	(70-130)		
LCS2	m,p-Xylenes		10	8.91	ug/L	89	(70-130)	20	8.3
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.940	ug/L	94	(50-150)		
MRL_LW	m,p-Xylenes		0.5	0.460	ug/L	92	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.77	ug/L	95	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.51	ug/L	90	(70-130)	20	5.6
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.11	ug/L	102	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.45	ug/L	89	(70-130)	20	14
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Naphthalene		5	4.87	ug/L	97	(70-130)		
LCS2	Naphthalene		5	4.89	ug/L	98	(70-130)	20	0.41
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.640	ug/L	128	(50-150)		
LCS1	n-Butylbenzene		5	4.65	ug/L	93	(70-130)		
LCS2	n-Butylbenzene		5	4.34	ug/L	87	(70-130)	20	6.9
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.550	ug/L	110	(50-150)		
LCS1	n-Propylbenzene		5	4.56	ug/L	91	(70-130)		
LCS2	n-Propylbenzene		5	4.22	ug/L	84	(70-130)	20	7.7
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	o-Chlorotoluene		5	4.62	ug/L	92	(70-130)		
LCS2	o-Chlorotoluene		5	4.27	ug/L	85	(70-130)	20	7.9
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.520	ug/L	104	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.78	ug/L	96	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	4.66	ug/L	93	(70-130)	20	2.5
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.540	ug/L	108	(50-150)		
LCS1	o-Xylene		5	5.04	ug/L	101	(70-130)		
LCS2	o-Xylene		5	4.61	ug/L	92	(70-130)	20	8.9
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.490	ug/L	98	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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 1 800 566 LABS (1 800 566 5227)

Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	p-Chlorotoluene		5	4.71	ug/L	94	(70-130)		
LCS2	p-Chlorotoluene		5	4.39	ug/L	88	(70-130)	20	7.0
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.520	ug/L	104	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.82	ug/L	96	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	4.53	ug/L	91	(70-130)	20	6.2
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.550	ug/L	110	(50-150)		
LCS1	p-Isopropyltoluene		5	4.64	ug/L	93	(70-130)		
LCS2	p-Isopropyltoluene		5	4.23	ug/L	85	(70-130)	20	9.2
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.510	ug/L	102	(50-150)		
LCS1	sec-Butylbenzene		5	4.60	ug/L	92	(70-130)		
LCS2	sec-Butylbenzene		5	4.21	ug/L	84	(70-130)	20	8.8
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Styrene		5	4.92	ug/L	98	(70-130)		
LCS2	Styrene		5	4.50	ug/L	90	(70-130)	20	8.9
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.460	ug/L	92	(50-150)		
LCS1	tert-amyl Methyl Ether		5	5.28	ug/L	106	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.78	ug/L	96	(70-130)	20	9.9
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.510	ug/L	102	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.10	ug/L	102	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.65	ug/L	93	(70-130)	20	9.2
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.530	ug/L	106	(50-150)		
LCS1	tert-Butylbenzene		5	4.03	ug/L	81	(70-130)		
LCS2	tert-Butylbenzene		5	3.71	ug/L	74	(70-130)	20	8.3
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.63	ug/L	93	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.46	ug/L	89	(70-130)	20	3.7
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.540	ug/L	108	(50-150)		
LCS1	Toluene		5	4.91	ug/L	98	(70-130)		
LCS2	Toluene		5	4.66	ug/L	93	(70-130)	20	5.2

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
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Report: 915470
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.500	ug/L	100	(50-150)		
LCS1	Toluene-d8 (S)		5	97.0	%	97	(70-130)		
LCS2	Toluene-d8 (S)		5	100	%	100	(70-130)		
MBLK	Toluene-d8 (S)			96.4	%	96	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	97.2	%	97	(70-130)		
MRLW	Toluene-d8 (S)		5	94.8	%	95	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.55	ug/L	91	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.13	ug/L	83	(70-130)	20	9.7
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.530	ug/L	106	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.77	ug/L	95	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.10	ug/L	82	(70-130)	20	15
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.570	ug/L	114	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.71	ug/L	94	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.37	ug/L	87	(70-130)	20	7.5
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.510	ug/L	102	(50-150)		
LCS1	Trichlorofluoromethane		5	4.31	ug/L	86	(70-130)		
LCS2	Trichlorofluoromethane		5	3.91	ug/L	78	(70-130)	20	9.7
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.56	ug/L	91	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.04	ug/L	81	(70-130)	20	12
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.500	ug/L	100	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.38	ug/L	88	(70-130)		
LCS2	Vinyl chloride (VC)		5	3.92	ug/L	78	(70-130)	20	11
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.390	ug/L	78	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.280	ug/L	112	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Fecal Coliform Small, Fecal Coliform Large), MPN/100 mL (Fecal Coliform), Presence/Absence (P/A)* (Fecal Coliform)

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required

Approved by

Date of Issue: 02/10/2021

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 02/10/2021

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 02/10/2021

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 02/10/2021

Quant Report - Page 1 of 1

, Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-49609-1
Client Project/Site: 915470

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
2/3/2021 4:44:54 PM

Lori Thompson, Project Manager I
(714)895-5494
Lori.Thompson@eurofinset.com

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 915470

Job ID: 570-49609-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 915470

Job ID: 570-49609-1

Job ID: 570-49609-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-49609-1

Comments

No additional comments.

Receipt

The samples were received on 1/28/2021 12:33 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.5° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-126107. LCS/LCSD were performed to meet QC requirements

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 915470

Job ID: 570-49609-1

Client Sample ID: 202101270710

Lab Sample ID: 570-49609-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	2.52		0.971	0.777	mg/L	1		1664A	Total/NA

Client Sample ID: 202101270720

Lab Sample ID: 570-49609-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
HEM: Oil and Grease	2.33		0.973	0.778	mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 915470

Job ID: 570-49609-1

General Chemistry

Client Sample ID: 202101270710

Date Collected: 01/27/21 11:01

Date Received: 01/28/21 12:33

Lab Sample ID: 570-49609-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	2.52		0.971	0.777	mg/L		02/01/21 16:50	02/02/21 10:33	1

Client Sample ID: 202101270720

Date Collected: 01/27/21 13:01

Date Received: 01/28/21 12:33

Lab Sample ID: 570-49609-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	2.33		0.973	0.778	mg/L		02/01/21 16:50	02/02/21 10:33	1

QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 915470

Job ID: 570-49609-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-126107/1-A
Matrix: Water
Analysis Batch: 126266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 126107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		02/01/21 16:50	02/02/21 10:33	1

Lab Sample ID: LCS 570-126107/2-A
Matrix: Water
Analysis Batch: 126266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 126107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.20		mg/L		93	78 - 114

Lab Sample ID: LCSD 570-126107/3-A
Matrix: Water
Analysis Batch: 126266

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 126107

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.40		mg/L		93	78 - 114	1	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 915470

Job ID: 570-49609-1

General Chemistry

Prep Batch: 126107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-49609-1	202101270710	Total/NA	Water	1664A	
570-49609-2	202101270720	Total/NA	Water	1664A	
MB 570-126107/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-126107/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-126107/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 126266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-49609-1	202101270710	Total/NA	Water	1664A	126107
570-49609-2	202101270720	Total/NA	Water	1664A	126107
MB 570-126107/1-A	Method Blank	Total/NA	Water	1664A	126107
LCS 570-126107/2-A	Lab Control Sample	Total/NA	Water	1664A	126107
LCSD 570-126107/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	126107

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 915470

Job ID: 570-49609-1

Client Sample ID: 202101270710

Lab Sample ID: 570-49609-1

Date Collected: 01/27/21 11:01

Matrix: Water

Date Received: 01/28/21 12:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1030 mL	1000 mL	126107	02/01/21 16:50	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			126266	02/02/21 10:33	F7UI	ECL 1

Instrument ID: NOEQUIP

Client Sample ID: 202101270720

Lab Sample ID: 570-49609-2

Date Collected: 01/27/21 13:01

Matrix: Water

Date Received: 01/28/21 12:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1028 mL	1000 mL	126107	02/01/21 16:50	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			126266	02/02/21 10:33	F7UI	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 915470

Job ID: 570-49609-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-21
California	State	2944	09-30-21
Guam	State	20-003R	10-31-20 *
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-30-22
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 915470

Job ID: 570-49609-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 915470

Job ID: 570-49609-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-49609-1	202101270710	Water	01/27/21 11:01	01/28/21 12:33	
570-49609-2	202101270720	Water	01/27/21 13:01	01/28/21 12:33	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

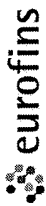
49609

Submittal Form

Date: 1/28/2021

***REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!**
Report & Invoice must have the Folder # 915470 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.
Results must have Complete data & QC with Approval Signature.



Eaton Analytical

Ship To:

Eurofins CalScience
7440 Lincoln Way

Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax 714-894-7501

Folder #: 915470
Report Due: 02/10/2021

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: Eaton-MonroviaSubContract@eurofinset.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA. 17605

Provide in each Report the
Specified State Certification # and
Exp Date for requested tests + matrix.
Samples from CALIFORNIA



570-49609 Chain of Custody

Sample ID 202101270710 Client Sample ID for reference onl LH-INF-20210127 Sample Date & Time Matrix 01/27/21 1101 DW PWS Systemcode PWSID JLS

Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Method EPA 1664 Prep Method Analysis Requested

Oil and Grease by 1664(subbed)

Sample ID 202101270720 Client Sample ID for reference onl MB-INF-20210127 Sample Date & Time Matrix 01/27/21 1301 DW PWS Systemcode PWSID JLS

Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Method EPA 1664 Prep Method Analysis Requested

Oil and Grease by 1664(subbed)

Relinquished by: *[Signature]* Date 1/28/21 Time 12:33 Sample Control

Received by: *[Signature]* Date 1/28/21 Time 12:33

Relinquished by: Sample Control Date Time

Received by: Sample Control Date Time

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

3-6/2-5 56



Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-49609-1

Login Number: 49609

List Source: Eurofins Calscience

List Number: 1

Creator: Ramos, Maribel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Preservation labels on samples match COC
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 920474
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 920474
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **February 24, 2021** at **1440**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202102240313</u>	GAC-1-20210224 Static ID: 537.1 @537.1	02/24/2021 0903
<u>202102240314</u>	GAC-2-20210224 Static ID: 537.1 @537.1	02/24/2021 0906
<u>202102240315</u>	GAC-3-20210224 Static ID: 537.1 @537.1	02/24/2021 0909
<u>202102240316</u>	GAC-4-20210224 Static ID: 537.1 @537.1	02/24/2021 0912
<u>202102240317</u>	IX-1-20210224 Static ID: 537.1 @537.1	02/24/2021 0915
<u>202102240318</u>	IX-2-20210224 Static ID: 537.1 @537.1	02/24/2021 0918
<u>202102240319</u>	IX-3-20210224 Static ID: 537.1 @537.1	02/24/2021 0921
<u>202102240320</u>	IX-4-20210224 Static ID: 537.1 @537.1	02/24/2021 0924
<u>202102240321</u>	LH-INF-20210224 Static ID: 537.1 @537.1	02/24/2021 0927
<u>202102240322</u>	IX-5-20210224 Static ID: 537.1 @537.1	02/24/2021 1103
<u>202102240323</u>	IX-6-20210224 Static ID: 537.1	02/24/2021 1106

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 920474
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **February 24, 2021** at **1440**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

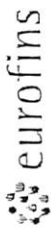
Sample #	Sample ID	Sample Date
	@537.1	
202102240324	IX-7-20210224 Static ID: 537.1	02/24/2021 1109
	@537.1	
202102240325	IX-8-20210224 Static ID: 537.1	02/24/2021 1112
	@537.1	
202102240326	GAC-5-20210224 Static ID: 537.1	02/24/2021 1115
	@537.1	
202102240328	GAC-6-20210224	02/24/2021 1118
	@537.1	
202102240329	GAC-7-20210224	02/24/2021 1121
	@537.1	
202102240330	GAC-8-20210224	02/24/2021 1124
	@537.1	
202102240331	MB-INF-20210224	02/24/2021 1127
	@537.1	
	Dissolved Organic Carbon	Total Organic Carbon

Test Description

@537.1 -- EPA Method 537.1

920474

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302	
PROJECT CONTACT: Miae Jeon GLOBAL ID:		LAB CONTACT: Sophia Liang		SAMPLER(S): (PRINT) RDT	
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		REQUESTED ANALYSES Please check box or fill in blank as needed.			
LABORATORY: Eurofins Eaton Analytical		Turnaround Time: <input type="checkbox"/> Same Day <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS		Total Hardness as CaCO3 (SM 2340B) VOCs (EPA 524.2) TOC (SM 5310C) TDS (SM 2540D) Oil & Grease (EPA 1664)	
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com; Provide EDD of sample results		Field Filtered: <input type="checkbox"/> Preserved: <input type="checkbox"/> Unpreserved: <input checked="" type="checkbox"/>		Hexavalent Chromium (EPA 218.6) Perchlorate (EPA 314.0) Manganese (EPA 200.8) Uranium, Arsenic, Alkalinity (as CaCO3), (SM 2320B) Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	
SAMPLE ID		DATE		TIME	
MATRIX		NO. OF CONT.		PFAS - full list (EPA 537.1)	
GAC-1 - 20210224		2-24		0903	
GAC-2 - 20210224		2-24		0906	
GAC-3 - 20210224		2-24		0909	
GAC-4 - 20210224		2-24		0912	
IX-1 - 20210224		2-24		0915	
IX-2 - 20210224		2-24		0918	
IX-3 - 20210224		2-24		0921	
IX-4 - 20210224		2-24		0924	
GAC-4M - 20210224		2-24		0927	
GAC-2M - 20210224		2-24		0927	
GAC-3M - 20210224		2-24		0927	
GAC-4M - 20210224		2-24		0927	
IX-1M - 20210224		2-24		0927	
IX-2M - 20210224		2-24		0927	
IX-3M - 20210224		2-24		0927	
IX-4M - 20210224		2-24		0927	
LH-INF - 20210224		2-24		0927	
Relinquished by: (Signature) <i>[Signature]</i>		Relinquished by: (Signature) <i>[Signature]</i>		Received by: (Signature) <i>[Signature]</i>	
Relinquished by: (Signature)		Relinquished by: (Signature)		Received by: (Signature)	
Relinquished by: (Signature)		Relinquished by: (Signature)		Received by: (Signature)	



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

91204774

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / NO

IR Gun ID = 649A (Observation = 13.4 °C) (Corr. Factor = 0.2 °C) (Final = 13.4 °C)

TYPE OF ICE: Real Synthetic No Ice Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up Walk-In FedEx / UPS / DHL / Area Fast / Top Line / Other:

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) Headspace:

No Samples with Headspace:

Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 815-4, HAA (8251, 852), 805, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Samp ID	Bottle #	None/<6 mm	>6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: Yan PRINT NAME: Yan COMPANY/TITLE: Eurofins Eaton Analytical DATE: 2-24-21 TIME: 1440

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 920474
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
02/27/2021 17:09	Perfluorobutanesulfonic acid (PFBS)	202102240315 <u>GAC-3-20210224</u>	0.0030		ug/L	0.0020
02/27/2021 18:06	Perfluorohexanoic acid (PFHxA)	202102240317 <u>IX-1-20210224</u>	0.0040		ug/L	0.0020
02/27/2021 18:06	Perfluorooctanoic acid (PFOA)		0.0036		ug/L	0.0020
02/27/2021 18:16	Perfluorohexanoic acid (PFHxA)	202102240318 <u>IX-2-20210224</u>	0.0043		ug/L	0.0020
02/27/2021 18:16	Perfluorooctanoic acid (PFOA)		0.0022		ug/L	0.0020
02/27/2021 18:25	Perfluoroheptanoic acid (PFHpA)	202102240319 <u>IX-3-20210224</u>	0.0023		ug/L	0.0020
02/27/2021 18:25	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
02/27/2021 18:25	Perfluorooctanoic acid (PFOA)		0.0053		ug/L	0.0020
02/27/2021 18:35	Perfluorohexanoic acid (PFHxA)	202102240320 <u>IX-4-20210224</u>	0.0042		ug/L	0.0020
02/27/2021 18:35	Perfluorooctanoic acid (PFOA)		0.0021		ug/L	0.0020
03/02/2021 19:30	Dissolved Organic Carbon	202102240321 <u>LH-INF-20210224</u>	1.2		mg/L	0.40
02/27/2021 18:55	Perfluorobutanesulfonic acid (PFBS)		0.0067		ug/L	0.0020
02/27/2021 18:55	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
02/27/2021 18:55	Perfluorohexanesulfonic acid (PFHxS)		0.0065		ug/L	0.0020
02/27/2021 18:55	Perfluorohexanoic acid (PFHxA)		0.0078		ug/L	0.0020
02/27/2021 18:55	Perfluorononanoic acid (PFNA)		0.0034		ug/L	0.0020
02/27/2021 18:55	Perfluorooctanesulfonic acid (PFOS)		0.032		ug/L	0.0020
02/27/2021 18:55	Perfluorooctanoic acid (PFOA)		0.017		ug/L	0.0020
02/26/2021 20:53	Total Organic Carbon		0.58		mg/L	0.20
02/27/2021 19:06	Perfluorohexanoic acid (PFHxA)	202102240322 <u>IX-5-20210224</u>	0.0062		ug/L	0.0020
02/27/2021 19:06	Perfluorooctanoic acid (PFOA)		0.0030		ug/L	0.0020
02/27/2021 19:16	Perfluoroheptanoic acid (PFHpA)	202102240323 <u>IX-6-20210224</u>	0.0041		ug/L	0.0020
02/27/2021 19:16	Perfluorohexanoic acid (PFHxA)		0.0074		ug/L	0.0020
02/27/2021 19:16	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
02/27/2021 19:26	Perfluoroheptanoic acid (PFHpA)	202102240324 <u>IX-7-20210224</u>	0.0049		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

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Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
02/27/2021 19:26	Perfluorohexanoic acid (PFHxA)		0.0071		ug/L	0.0020
02/27/2021 19:26	Perfluorooctanoic acid (PFOA)		0.0088		ug/L	0.0020
		202102240325 IX-8-20210224				
02/27/2021 19:35	Perfluoroheptanoic acid (PFHpA)		0.0045		ug/L	0.0020
02/27/2021 19:35	Perfluorohexanoic acid (PFHxA)		0.0078		ug/L	0.0020
02/27/2021 19:35	Perfluorooctanoic acid (PFOA)		0.0051		ug/L	0.0020
		202102240326 GAC-5-20210224				
02/27/2021 19:45	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
02/27/2021 19:45	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
02/27/2021 19:45	Perfluorohexanesulfonic acid (PFHxS)		0.0040		ug/L	0.0020
02/27/2021 19:45	Perfluorohexanoic acid (PFHxA)		0.0075		ug/L	0.0020
02/27/2021 19:45	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
02/27/2021 19:45	Perfluorooctanesulfonic acid (PFOS)		0.012		ug/L	0.0020
02/27/2021 19:45	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		202102240328 GAC-6-20210224				
02/27/2021 19:54	Perfluorobutanesulfonic acid (PFBS)		0.013		ug/L	0.0020
02/27/2021 19:54	Perfluoroheptanoic acid (PFHpA)		0.0060		ug/L	0.0020
02/27/2021 19:54	Perfluorohexanesulfonic acid (PFHxS)		0.0048		ug/L	0.0020
02/27/2021 19:54	Perfluorohexanoic acid (PFHxA)		0.0089		ug/L	0.0020
02/27/2021 19:54	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
		202102240329 GAC-7-20210224				
02/27/2021 20:04	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
02/27/2021 20:04	Perfluoroheptanoic acid (PFHpA)		0.0047		ug/L	0.0020
02/27/2021 20:04	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
02/27/2021 20:04	Perfluorohexanoic acid (PFHxA)		0.0080		ug/L	0.0020
02/27/2021 20:04	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
02/27/2021 20:04	Perfluorooctanesulfonic acid (PFOS)		0.013		ug/L	0.0020
02/27/2021 20:04	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
		202102240330 GAC-8-20210224				
02/27/2021 20:13	Perfluorobutanesulfonic acid (PFBS)		0.0091		ug/L	0.0020
02/27/2021 20:13	Perfluoroheptanoic acid (PFHpA)		0.0027		ug/L	0.0020
02/27/2021 20:13	Perfluorohexanesulfonic acid (PFHxS)		0.0023		ug/L	0.0020
02/27/2021 20:13	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
02/27/2021 20:13	Perfluorooctanesulfonic acid (PFOS)		0.0050		ug/L	0.0020
02/27/2021 20:13	Perfluorooctanoic acid (PFOA)		0.0068		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

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Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
	202102240331	<u>MB-INF-20210224</u>				
03/02/2021 19:48	Dissolved Organic Carbon		1.3		mg/L	0.40
02/27/2021 20:23	Perfluorobutanesulfonic acid (PFBS)		0.0096		ug/L	0.0020
02/27/2021 20:23	Perfluorodecanoic acid (PFDA)		0.0021		ug/L	0.0020
02/27/2021 20:23	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
02/27/2021 20:23	Perfluorohexanesulfonic acid (PFHxS)		0.0067		ug/L	0.0020
02/27/2021 20:23	Perfluorohexanoic acid (PFHxA)		0.0067		ug/L	0.0020
02/27/2021 20:23	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
02/27/2021 20:23	Perfluorooctanesulfonic acid (PFOS)		0.042		ug/L	0.0020
02/27/2021 20:23	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
02/26/2021 21:15	Total Organic Carbon		0.70		mg/L	0.20

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Water Replenishment District
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 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20210224 (202102240313)					Sampled on 02/24/2021 0903				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	13C2-PFHxA	102	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	100	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	102	%		1
02/25/21	02/27/21 16:50	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	82	%		1

GAC-2-20210224 (202102240314)					Sampled on 02/24/2021 0906				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	13C2-PFDA	77	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	13C2-PFHxA	91	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	118	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	88	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	103	%		1
02/25/21	02/27/21 17:47	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	85	%		1

GAC-3-20210224 (202102240315)

Sampled on 02/24/2021 0909

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Water Replenishment District
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Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0030	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	13C2-PFDA	83	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	13C2-PFHxA	98	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	93	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	100	%		1
02/25/21	02/27/21 17:09	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1

GAC-4-20210224 (202102240316)

Sampled on 02/24/2021 0912

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	13C2-PFDA	77	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	13C2-PFHxA	93	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	114	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	90	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	100	%		1
02/25/21	02/27/21 17:56	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	83	%		1

IX-1-20210224 (202102240317)

Static ID: 537.1

Sampled on 02/24/2021 0915

EPA 537.1 - EPA Method 537.1

02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0036	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	13C2-PFDA	94	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	13C2-PFHxA	107	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	101	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	106	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	103	%		1
02/25/21	02/27/21 18:06	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1

IX-2-20210224 (202102240318)

Sampled on 02/24/2021 0918

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0022	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	13C2-PFHxA	103	%		1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	97	%		1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	102	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 18:16	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1
IX-3-20210224 (202102240319)						Sampled on 02/24/2021 0921			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0053	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	13C2-PFHxA	101	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	97	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	105	%		1
02/25/21	02/27/21 18:25	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	90	%		1

IX-4-20210224 (202102240320)						Sampled on 02/24/2021 0924			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0021	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	13C2-PFDA	92	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	13C2-PFHxA	98	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	94	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	102	%		1
02/25/21	02/27/21 18:35	1309506	1310391	(EPA 537.1)	d5-NETFOSAA	94	%		1

LH-INF-20210224 (202102240321)

Sampled on 02/24/2021 0927

Static ID: 537.1

SM 5310C - Total Organic Carbon

02/26/21 20:53	1309647	(SM 5310C)	Total Organic Carbon	0.58	mg/L	0.20	1
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SM 5310C - Dissolved Organic Carbon

02/25/21 03/02/21 19:30	1309528	1310664	(SM 5310C)	Dissolved Organic Carbon	1.2	mg/L	0.40	2
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EPA 537.1 - EPA Method 537.1

02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0067	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0065	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0078	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0034	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.032	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.017	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	13C2-PFHxA	100	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	99	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	109	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	101	%		1
02/25/21	02/27/21 18:55	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	88	%		1

IX-5-20210224 (202102240322)

Sampled on 02/24/2021 1103

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0062	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0030	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	13C2-PFDA	86	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	13C2-PFHxA	99	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	96	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	106	%		1
02/25/21	02/27/21 19:06	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	84	%		1

IX-6-20210224 (202102240323)

Sampled on 02/24/2021 1106

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0074	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	13C2-PFDA	87	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	13C2-PFHxA	97	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	95	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	107	%		1
02/25/21	02/27/21 19:16	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	90	%		1

IX-7-20210224 (202102240324)

Sampled on 02/24/2021 1109

Static ID: 537.1

EPA 537.1 - EPA Method 537.1

02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0049	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0071	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0088	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	13C2-PFDA	83	%		1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	13C2-PFHxA	98	%		1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	91	%		1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	111	%		1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	111	%		1
02/25/21	02/27/21 19:26	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1
<u>IX-8-20210224 (202102240325)</u>						Sampled on 02/24/2021 1112			
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	11-chloroeicosaffluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0045	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0078	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0051	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	13C2-PFDA	86	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	13C2-PFHxA	98	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	95	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	107	%		1
02/25/21	02/27/21 19:35	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1
<u>GAC-5-20210224 (202102240326)</u>						Sampled on 02/24/2021 1115			
Static ID: 537.1									

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution	
EPA 537.1 - EPA Method 537.1										
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ug/L	0.0020	1	
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0040	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0075	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.012	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	13C2-PFHxA	100	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	97	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	107	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	106	%		1
02/25/21	02/27/21	19:45	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1

GAC-6-20210224 (202102240328)

Sampled on 02/24/2021 1118

EPA 537.1 - EPA Method 537.1									
02/25/21	02/27/21	19:54	1309506	1310391	(EPA 537.1)	11-chloroicosafuoro-3-oxaundecane-sulfonic acid	ug/L	0.0020	1
02/25/21	02/27/21	19:54	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ug/L	0.0020	1
02/25/21	02/27/21	19:54	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.013	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0060	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0048	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0089	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	13C2-PFDA	87	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	13C2-PFHxA	103	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	99	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	104	%		1
02/25/21	02/27/21 19:54	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1

GAC-7-20210224 (202102240329)

Sampled on 02/24/2021 1121

EPA 537.1 - EPA Method 537.1

02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0047	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0080	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.013	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	13C2-PFDA	95	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	13C2-PFHxA	106	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	100	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	105	%		1
02/25/21	02/27/21 20:04	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	92	%		1

GAC-8-20210224 (202102240330)

Sampled on 02/24/2021 1124

EPA 537.1 - EPA Method 537.1

02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	11-chloroheicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0091	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0027	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0023	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0050	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0068	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	13C2-PFDA	91	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	13C2-PFHxA	102	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	97	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	106	%		1
02/25/21	02/27/21 20:13	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	90	%		1

MB-INF-20210224 (202102240331)

Sampled on 02/24/2021 1127

SM 5310C - Total Organic Carbon

02/26/21 21:15	1309647	(SM 5310C)	Total Organic Carbon	0.70	mg/L	0.20	1
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SM 5310C - Dissolved Organic Carbon

02/25/21 03/02/21 19:48	1309528	1310664	(SM 5310C)	Dissolved Organic Carbon	1.3	mg/L	0.40	2
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EPA 537.1 - EPA Method 537.1

02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0096	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0021	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0067	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0067	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.042	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 02/24/2021 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	13C2-PFDA	88	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	13C2-PFHxA	103	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	13C3-HFPO-DA	99	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	13C4-PFOS- IS#2	110	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	d3-NMeFOSAA	112	%		1
02/25/21	02/27/21 20:23	1309506	1310391	(EPA 537.1)	d5-NEtFOSAA	87	%		1

Rounding on totals after summation.
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Water Replenishment District

Total Organic Carbon**Analytical Batch: 1309647**

202102240321 LH-INF-20210224
202102240331 MB-INF-20210224

Analysis Date: 02/26/2021

Analyzed by: ZB2Z
Analyzed by: ZB2Z

EPA Method 537.1**Prep Batch: 1309506 Analytical Batch: 1310391**

202102240313 GAC-1-20210224
202102240314 GAC-2-20210224
202102240315 GAC-3-20210224
202102240316 GAC-4-20210224
202102240317 IX-1-20210224
202102240318 IX-2-20210224
202102240319 IX-3-20210224
202102240320 IX-4-20210224
202102240321 LH-INF-20210224
202102240322 IX-5-20210224
202102240323 IX-6-20210224
202102240324 IX-7-20210224
202102240325 IX-8-20210224
202102240326 GAC-5-20210224
202102240328 GAC-6-20210224
202102240329 GAC-7-20210224
202102240330 GAC-8-20210224
202102240331 MB-INF-20210224

Analysis Date: 02/27/2021

Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM
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Analyzed by: KAM
Analyzed by: KAM
Analyzed by: KAM

Dissolved Organic Carbon**Prep Batch: 1309528 Analytical Batch: 1310664**

202102240321 LH-INF-20210224
202102240331 MB-INF-20210224

Analysis Date: 03/02/2021

Analyzed by: ZB2Z
Analyzed by: ZB2Z

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Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Total Organic Carbon by SM 5310C									
Analytical Batch: 1309647					Analysis Date: 02/26/2021				
LCS1	Total Organic Carbon		5	5.44	mg/L	109	(90-110)		
LCS2	Total Organic Carbon		5	5.44	mg/L	109	(90-110)	20	0.0
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.254	mg/L	127	(50-150)		
MS_202102230856	Total Organic Carbon	1.4	4	4.36	mg/L	<u>73</u>	(80-120)		
MS2_202102240484	Total Organic Carbon	ND	2	2.58	mg/L	<u>122</u>	(80-120)		
MSD_202102230856	Total Organic Carbon	1.4	4	4.32	mg/L	<u>72</u>	(80-120)	20	0.58
MSD2_202102240484	Total Organic Carbon	ND	2	2.42	mg/L	114	(80-120)	20	6.2

EPA Method 537.1 by EPA 537.1

Prep Batch: 1309506 Analytical Batch: 1310391

Analysis Date: 02/27/2021

DUP_202102240315	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0458	ug/L	97	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0456	ug/L	97	(70-130)	30	0.44
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00186	ug/L	99	(50-150)		
MS_202102240313	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00191	ug/L	102	(50-150)		
DUP_202102240315	13C2-PFDA (S)			84.8	%	85	(70-130)		
LCS3	13C2-PFDA (S)		100	90.9	%	91	(70-130)		
LCS4	13C2-PFDA (S)		100	93.5	%	93	(70-130)		
MBLK	13C2-PFDA (S)			94.3	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.4	%	98	(70-130)		
MS_202102240313	13C2-PFDA (S)		100	95.8	%	96	(70-130)		
DUP_202102240315	13C2-PFHxA (S)			95.1	%	95	(70-130)		
LCS3	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS4	13C2-PFHxA (S)		100	106	%	106	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MS_202102240313	13C2-PFHxA (S)		100	110	%	110	(70-130)		
DUP_202102240315	13C2-PFOA- IS#1 (I)			113	%	113	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			98.8	%	99	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS_202102240313	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
DUP_202102240315	13C3-HFPO-DA (S)			92.5	%	92	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 920474
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	13C3-HFPO-DA (S)		100	96.8	%	97	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	101	%	101	(70-130)		
MBLK	13C3-HFPO-DA (S)			103	%	103	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MS_202102240313	13C3-HFPO-DA (S)		100	104	%	105	(70-130)		
DUP_202102240315	13C4-PFOS- IS#2 (I)			105	%	105	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MS_202102240313	13C4-PFOS- IS#2 (I)		100	103	%	103	(50-150)		
DUP_202102240315	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0517	ug/L	107	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0518	ug/L	107	(70-130)	30	0.39
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00221	ug/L	117	(50-150)		
MS_202102240313	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00219	ug/L	116	(50-150)		
DUP_202102240315	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0484	ug/L	104	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0487	ug/L	104	(70-130)	30	0.62
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00212	ug/L	114	(50-150)		
MS_202102240313	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00209	ug/L	113	(50-150)		
DUP_202102240315	d3-NMeFOSAA (I)			101	%	101	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	99.9	%	100	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	99.7	%	100	(50-150)		
MBLK	d3-NMeFOSAA (I)			92.9	%	93	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MS_202102240313	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
DUP_202102240315	d5-NEtFOSAA (S)			89.5	%	90	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	86.9	%	87	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	88.2	%	88	(70-130)		
MBLK	d5-NEtFOSAA (S)			95.2	%	95	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	91.4	%	91	(70-130)		
MS_202102240313	d5-NEtFOSAA (S)		100	97.3	%	97	(70-130)		
DUP_202102240315	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0522	ug/L	104	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0528	ug/L	106	(70-130)	30	1.1

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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00222	ug/L	111	(50-150)		
MS_202102240313	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00220	ug/L	110	(50-150)		
DUP_202102240315	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0491	ug/L	98	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0486	ug/L	97	(70-130)	30	1.0
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00205	ug/L	102	(50-150)		
MS_202102240313	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00213	ug/L	107	(50-150)		
DUP_202102240315	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0506	ug/L	101	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0511	ug/L	102	(70-130)	30	0.98
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	112	(50-150)		
MS_202102240313	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00226	ug/L	113	(50-150)		
DUP_202102240315	Perfluorobutanesulfonic acid (PFBS)	0.0030		0.00301	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0483	ug/L	109	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0476	ug/L	108	(70-130)	30	1.5
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00206	ug/L	116	(50-150)		
MS_202102240313	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00311	ug/L	108	(50-150)		
DUP_202102240315	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0526	ug/L	105	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0518	ug/L	104	(70-130)	30	1.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00219	ug/L	110	(50-150)		
MS_202102240313	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00218	ug/L	109	(50-150)		
DUP_202102240315	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0502	ug/L	100	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0525	ug/L	105	(70-130)	30	4.5
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00210	ug/L	105	(50-150)		
MS_202102240313	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00200	ug/L	100	(50-150)		
DUP_202102240315	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0549	ug/L	110	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0555	ug/L	111	(70-130)	30	1.1
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00231	ug/L	116	(50-150)		

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 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202102240313	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00249	ug/L	114	(50-150)		
DUP_202102240315	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0488	ug/L	107	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0492	ug/L	108	(70-130)	30	0.82
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00212	ug/L	116	(50-150)		
MS_202102240313	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00228	ug/L	119	(50-150)		
DUP_202102240315	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0566	ug/L	113	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0568	ug/L	114	(70-130)	30	0.35
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00237	ug/L	119	(50-150)		
MS_202102240313	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00372	ug/L	112	(50-150)		
DUP_202102240315	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0523	ug/L	105	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0549	ug/L	110	(70-130)	30	4.8
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00230	ug/L	115	(50-150)		
MS_202102240313	Perfluorononanoic acid (PFNA)	ND	0.002	0.00230	ug/L	111	(50-150)		
DUP_202102240315	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0494	ug/L	107	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0481	ug/L	104	(70-130)	30	2.7
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00225	ug/L	121	(50-150)		
MS_202102240313	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00237	ug/L	115	(50-150)		
DUP_202102240315	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0547	ug/L	109	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0550	ug/L	110	(70-130)	30	0.55
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00238	ug/L	119	(50-150)		
MS_202102240313	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00295	ug/L	113	(50-150)		
DUP_202102240315	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0500	ug/L	100	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0482	ug/L	96	(70-130)	30	3.7
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00182	ug/L	91	(50-150)		
MS_202102240313	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00189	ug/L	95	(50-150)		
DUP_202102240315	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 920474
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0467	ug/L	93	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0476	ug/L	95	(70-130)	30	1.9
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00200	ug/L	100	(50-150)		
MS_202102240313	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00203	ug/L	101	(50-150)		
DUP_202102240315	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0501	ug/L	100	(70-130)	30	1.8
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00206	ug/L	103	(50-150)		
MS_202102240313	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00211	ug/L	105	(50-150)		

Dissolved Organic Carbon by SM 5310C

Analytical Batch: 1310664

Analysis Date: 03/02/2021

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Dissolved Organic Carbon		5	5.12	mg/L	102	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.07	mg/L	101	(90-110)	20	0.98
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.299	mg/L	150	(50-150)		
MS_202103030146	Dissolved Organic Carbon	2.5	4	6.29	mg/L	94	(80-120)		
MS2_202103030147	Dissolved Organic Carbon	2.6	2	4.46	mg/L	94	(80-120)		
MSD_202103030146	Dissolved Organic Carbon	2.5	4	6.44	mg/L	97	(80-120)	20	2.3
MSD2_202103030147	Dissolved Organic Carbon	2.6	2	4.52	mg/L	97	(80-120)	20	1.4

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 03/06/2021

Quant Report - Page 1 of 1

, Tel Fax

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 03/06/2021

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 03/06/2021

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

Colilert Report - Page 1 of 1

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	E. Coli Large	Total Coliform	E. Coli	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 03/06/2021

Quant Report - Page 1 of 1

, Tel Fax

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 925810
Project: 0250000
Group: WRD Pilot [Set #1]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 925810
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **March 25, 2021 at 1620**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202103250304</u>	GAC-1-20210325	03/25/2021 1004
	@537.1	
<u>202103250305</u>	GAC-2-20210325	03/25/2021 1007
	@537.1	
<u>202103250306</u>	GAC-3-20210325	03/25/2021 1010
	@537.1	
<u>202103250307</u>	GAC-4-20210325	03/25/2021 1013
	@537.1	
<u>202103250308</u>	IX-1--20210325	03/25/2021 1016
	@537.1	
<u>202103250309</u>	IX-2-20210325	03/25/2021 1019
	@537.1	
<u>202103250310</u>	IX-3-20210325	03/25/2021 1022
	@537.1	
<u>202103250311</u>	IX-4-20210325	03/25/2021 1025
	@537.1	
<u>202103250312</u>	GAC-1M-20210325	03/25/2021 1028
	@537.1	
<u>202103250313</u>	GAC-2M-20210325	03/25/2021 1031
	@537.1	
<u>202103250314</u>	GAC-3M-20210325	03/25/2021 1034
	@537.1	
<u>202103250315</u>	GAC-4M-20210325	03/25/2021 1037
	@537.1	
<u>202103250316</u>	IX-1M-20210325	03/25/2021 1040
	@537.1	

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 925810
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **March 25, 2021** at **1620**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202103250317	IX-2M-20210325	03/25/2021 1043
	@537.1	
202103250318	IX-3M-20210325	03/25/2021 1046
	@537.1	
202103250319	IX-4M-20210325	03/25/2021 1049
	@537.1	
202103250320	LH-INF-20210325	03/25/2021 1052
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Dissolved Organic Carbon
	Iron Total ICAP	L-CLO4
	Manganese Total ICAP/MS	Oil and Grease by 1664(subbed)
	Sodium Total ICAP	Sulfate
	Total Hardness as CaCO3 by ICP	Total Organic Carbon
	Uranium by ICPMS as pCi/L	Uranium ICAP/MS
		Calcium Total ICAP
		Hexavalent chromium(Dissolved)
		Magnesium Total ICAP
		Potassium Total ICAP
		Total Dissolved Solid (TDS)
		Total Suspended Solids (TSS)
202103250321	IX-5-20210325	03/25/2021 1204
	@537.1	
202103250322	IX-6-20210325	03/25/2021 1207
	@537.1	
202103250323	IX-7-20210325	03/25/2021 1210
	@537.1	
202103250324	IX-8-20210325	03/25/2021 1213
	@537.1	
202103250325	GAC-5-20210325	03/25/2021 1216
	@537.1	
202103250326	GAC-6-20210325	03/25/2021 1219
	@537.1	
202103250327	GAC-7-20210325	03/25/2021 1222

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 925810
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **March 25, 2021** at **1620**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
	@537.1	
202103250328	GAC-8-20210325	03/25/2021 1225
	@537.1	
202103250329	IX-5M-20210325	03/25/2021 1403
	@537.1	
202103250330	IX-6M-20210325	03/25/2021 1406
	@537.1	
202103250331	IX-7M-20210325	03/25/2021 1409
	@537.1	
202103250332	IX-8M-20210325	03/25/2021 1412
	@537.1	
202103250333	GAC-5M-20210325	03/25/2021 1415
	@537.1	
202103250334	GAC-6M-20210325	03/25/2021 1418
	@537.1	
202103250335	GAC-7M-20210325	03/25/2021 1421
	@537.1	
202103250336	GAC-8M-20210325	03/25/2021 1424
	@537.1	
202103250337	MB-INF--20210325	03/25/2021 1228
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS
	Chloride	Calcium Total ICAP
	Iron Total ICAP	Dissolved Organic Carbon
	Manganese Total ICAP/MS	Hexavalent chromium(Dissolved)
	Sodium Total ICAP	L-CLO4
	Total Hardness as CaCO3 by ICP	Magnesium Total ICAP
	Uranium by ICPMS as pCi/L	Oil and Grease by 1664(subbed)
		Potassium Total ICAP
		Sulfate
		Total Dissolved Solid (TDS)
		Total Organic Carbon
		Total Suspended Solids (TSS)
		Uranium ICAP/MS

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 925810
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **March 25, 2021** at **1620**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
Test Description		
	@537.1 -- EPA Method 537.1	
	@ANIONS48 -- Nitrate, Nitrite by EPA 300.0	
	@VOASDWA -- Volatile Organics by GCMS	



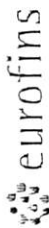
CHAIN-OF-CUSTODY RECORD

Date: 3-25-2021

Page 1 of 2

925810

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot PROJECT CONTACT: Miae Jeon GLOBAL ID:		PROJECT NO.: 5302 LAB CONTACT: Sophia Liang SAMPLER(S): (PRINT) RDT																																	
TEL: (949) 679-1070 E-MAIL: mjeon@gsi-net.com		LABORATORY: Eurofins Eaton Analytical																																			
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> STANDARD		REQUESTED ANALYSES Please check box or fill in blank as needed.																																			
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdorres@gsi-net.com; Provide EDD of sample results																																					
LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	PRESERVATION		PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0) (SM 2320B)	Alkalinity (as CaCO3), (SM 2320B)	Uranium, Arsenic, Manganese (EPA 200.8)	Perchlorate (EPA 314.0)	Hexavalent Chromium (EPA 218.6)	Fe, Na, K, Ca, Mg (EPA 200.7)	Total Hardness as CaCO3 (SM 2340B)	VOCs (EPA 524.2)	TOC (SM 5310C)	TDS (E160.1/SM 2540C)	TSS (SM 2540D)	Oil & Grease (EPA 1664)	DOC																
		DATE	TIME			Unpreserved	Preserved															Field Filtered															
	GAC-1 - 20210325	3-25-21	1004	Water	2			X																													
	GAC-2 - 20210325		1008	Water				X																													
	GAC-3 - 20210325		1010	Water				X																													
	GAC-4 - 20210325		1013	Water				X																													
	IX-1 - 20210325		1016	Water				X																													
	IX-2 - 20210325		1019	Water				X																													
	IX-3 - 20210325		1022	Water				X																													
	IX-4 - 20210325		1025	Water				X																													
	GAC-1M - 20210325		1028	Water				X																													
	GAC-2M - 20210325		1031	Water				X																													
	GAC-3M - 20210325		1034	Water				X																													
	GAC-4M - 20210325		1037	Water				X																													
	IX-1M - 20210325		1040	Water				X																													
	IX-2M - 20210325		1043	Water				X																													
	IX-3M - 20210325		1046	Water				X																													
	IX-4M - 20210325		1049	Water				X																													
	LH-INF - 20210325		1052	Water	15			X																													
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>						Date: 3-25-21		Time: 1620																							
Relinquished by: (Signature)						Received by: (Signature) <i>[Signature]</i>						Date: 3-25-21		Time: 1620																							
Relinquished by: (Signature)						Received by: (Signature)						Date:		Time:																							



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

925810

SAMPLE TEMP RECEIVED:

Notes: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 616 (Observation = 3.3 °C) (Corr.Factor = 0.2 °C) (Final = 3.1 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = °C) (Corr.Factor = °C) (Final = °C)	2 = (Observation = °C) (Corr.Factor = °C) (Final = °C)
3 = (Observation = °C) (Corr.Factor = °C) (Final = °C)	4 = (Observation = °C) (Corr.Factor = °C) (Final = °C)

4 DioxIn (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA and Radon Headspace: No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, 5PME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Sample ID	None/<6 mm	6mm	None/<6 mm	6mm	None/<6 mm	6mm	None/<6 mm	6mm
Sample ID	None/<6 mm	6mm	Sample ID	None/<6 mm	6mm	Sample ID	None/<6 mm	6mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: <u>Chun Brook</u>	PRINT NAME: <u>Chun Brook</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>3.25.21</u>	TIME: <u>1620</u>
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Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 925810
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove,
CAELAP 2944 exp 9-30-2021

Flags Legend:

- B4 - Target analyte detected in blank at or above method acceptance criteria.
- B7 - Target analyte detected in method blank at or above method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.
- H1 - Sample analysis performed past holding time.
- LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202103250306 <u>GAC-3-20210325</u>						
03/30/2021 03:05	Perfluorobutanesulfonic acid (PFBS)		0.0036		ug/L	0.0020
03/30/2021 03:05	Perfluorohexanoic acid (PFHxA)		0.0022		ug/L	0.0020
202103250308 <u>IX-1--20210325</u>						
03/30/2021 03:25	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
03/30/2021 03:25	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
202103250309 <u>IX-2-20210325</u>						
03/30/2021 03:34	Perfluoroheptanoic acid (PFHpA)		0.0023		ug/L	0.0020
03/30/2021 03:34	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
03/30/2021 03:34	Perfluorooctanoic acid (PFOA)		0.0030		ug/L	0.0020
202103250310 <u>IX-3-20210325</u>						
03/30/2021 03:44	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
03/30/2021 03:44	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
03/30/2021 03:44	Perfluorooctanoic acid (PFOA)		0.0066		ug/L	0.0020
202103250311 <u>IX-4-20210325</u>						
03/30/2021 14:06	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
03/30/2021 14:06	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
03/30/2021 14:06	Perfluorooctanoic acid (PFOA)		0.0028		ug/L	0.0020
202103250312 <u>GAC-1M-20210325</u>						
03/30/2021 14:17	Perfluorobutanesulfonic acid (PFBS)		0.0062		ug/L	0.0020
03/30/2021 14:17	Perfluorohexanesulfonic acid (PFHxS)		0.0032		ug/L	0.0020
03/30/2021 14:17	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
03/30/2021 14:17	Perfluorooctanesulfonic acid (PFOS)		0.0084		ug/L	0.0020
03/30/2021 14:17	Perfluorooctanoic acid (PFOA)		0.0079		ug/L	0.0020
202103250313 <u>GAC-2M-20210325</u>						
03/30/2021 14:27	Perfluorobutanesulfonic acid (PFBS)		0.0052		ug/L	0.0020
03/30/2021 14:27	Perfluorohexanoic acid (PFHxA)		0.0032		ug/L	0.0020
03/30/2021 14:27	Perfluorooctanoic acid (PFOA)		0.0029		ug/L	0.0020
202103250314 <u>GAC-3M-20210325</u>						
03/30/2021 14:36	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
03/30/2021 14:36	Perfluorohexanesulfonic acid (PFHxS)		0.0040		ug/L	0.0020
03/30/2021 14:36	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
03/30/2021 14:36	Perfluorooctanesulfonic acid (PFOS)		0.0080		ug/L	0.0020
03/30/2021 14:36	Perfluorooctanoic acid (PFOA)		0.0085		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

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 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202103250315 <u>GAC-4M-20210325</u>						
03/30/2021 12:00	Perfluorobutanesulfonic acid (PFBS)		0.0026		ug/L	0.0020
03/30/2021 12:00	Perfluorooctanesulfonic acid (PFOS)		0.0036		ug/L	0.0020
03/30/2021 12:00	Perfluorooctanoic acid (PFOA)		0.0032		ug/L	0.0020
202103250316 <u>IX-1M-20210325</u>						
03/30/2021 12:19	Perfluorobutanesulfonic acid (PFBS)		0.0022		ug/L	0.0020
03/30/2021 12:19	Perfluorohexanoic acid (PFHxA)		0.0031		ug/L	0.0020
03/30/2021 12:19	Perfluorooctanesulfonic acid (PFOS)		0.0053		ug/L	0.0020
03/30/2021 12:19	Perfluorooctanoic acid (PFOA)		0.0074		ug/L	0.0020
202103250317 <u>IX-2M-20210325</u>						
03/30/2021 14:46	Perfluorobutanesulfonic acid (PFBS)		0.0026		ug/L	0.0020
03/30/2021 14:46	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
03/30/2021 14:46	Perfluorooctanesulfonic acid (PFOS)		0.0020		ug/L	0.0020
03/30/2021 14:46	Perfluorooctanoic acid (PFOA)		0.0087		ug/L	0.0020
202103250318 <u>IX-3M-20210325</u>						
03/30/2021 14:56	Perfluorobutanesulfonic acid (PFBS)		0.0040		ug/L	0.0020
03/30/2021 14:56	Perfluorohexanoic acid (PFHxA)		0.0036		ug/L	0.0020
03/30/2021 14:56	Perfluorooctanesulfonic acid (PFOS)		0.0028		ug/L	0.0020
03/30/2021 14:56	Perfluorooctanoic acid (PFOA)		0.0087		ug/L	0.0020
202103250319 <u>IX-4M-20210325</u>						
03/30/2021 15:05	Perfluorobutanesulfonic acid (PFBS)		0.0048		ug/L	0.0020
03/30/2021 15:05	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
03/30/2021 15:05	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
03/30/2021 15:05	Perfluorononanoic acid (PFNA)		0.0022		ug/L	0.0020
03/30/2021 15:05	Perfluorooctanesulfonic acid (PFOS)		0.0044		ug/L	0.0020
03/30/2021 15:05	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
202103250320 <u>LH-INF-20210325</u>						
04/13/2021 00:11	Alkalinity in CaCO3 units		200		mg/L	2.0
03/30/2021 23:44	Arsenic Total ICAP/MS		2.6	10	ug/L	1.0
04/02/2021 4:43	Calcium Total ICAP		110		mg/L	1.0
03/26/2021 02:42	Chloride		110	250	mg/L	2.5
04/01/2021 16:14	Chloroform (Trichloromethane)		0.74		ug/L	0.50
03/30/2021 15:16	Dissolved Organic Carbon		0.63		mg/L	0.20
04/05/2021 12:26	Hexavalent chromium(Dissolved)		0.86		ug/L	0.020
04/02/2021 4:43	Magnesium Total ICAP		21		mg/L	0.10

SUMMARY OF POSITIVE DATA ONLY

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 Group: WRD Pilot [Set #1]

Water Replenishment District
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 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
03/26/2021 02:42	Nitrate as Nitrogen by IC		3.0	10	mg/L	0.50
03/26/2021 02:42	Nitrate as NO3 (calc)		13	45	mg/L	2.2
03/30/2021 15:15	Perfluorobutanesulfonic acid (PFBS)		0.0072		ug/L	0.0020
03/30/2021 15:15	Perfluorohexanesulfonic acid (PFHxS)		0.0063		ug/L	0.0020
03/30/2021 15:15	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
03/30/2021 15:15	Perfluorononanoic acid (PFNA)		0.0030		ug/L	0.0020
03/30/2021 15:15	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
03/30/2021 15:15	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
04/02/2021 4:43	Potassium Total ICAP		4.6		mg/L	1.0
04/02/2021 4:43	Sodium Total ICAP		70		mg/L	1.0
03/26/2021 02:42	Sulfate		160	250	mg/L	2.5
04/01/2021 01:08	Total Dissolved Solids (TDS)		640	500	mg/L	10
04/02/2021 05:51	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
03/26/2021 02:42	Total Nitrate, Nitrite-N, CALC		3.0		mg/L	0.10
03/31/2021 17:11	Total Organic Carbon		0.95		mg/L	0.20
04/01/2021 16:14	Total THM		0.74	80	ug/L	0.50
03/29/2021 14:29	Uranium by ICPMS as pCi/L		3.3		pCi/L	0.70
03/26/2021 22:33	Uranium ICAP/MS		4.9	30	ug/L	1.0
		202103250321 IX-5-20210325				
03/30/2021 15:25	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
03/30/2021 15:25	Perfluorohexanoic acid (PFHxA)		0.0062		ug/L	0.0020
03/30/2021 15:25	Perfluorooctanoic acid (PFOA)		0.0032		ug/L	0.0020
		202103250322 IX-6-20210325				
03/30/2021 15:34	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
03/30/2021 15:34	Perfluorohexanoic acid (PFHxA)		0.0073		ug/L	0.0020
03/30/2021 15:34	Perfluorooctanoic acid (PFOA)		0.0045		ug/L	0.0020
		202103250323 IX-7-20210325				
03/30/2021 17:32	Perfluoroheptanoic acid (PFHpA)		0.0045		ug/L	0.0020
03/30/2021 17:32	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
03/30/2021 17:32	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
		202103250324 IX-8-20210325				
03/30/2021 17:42	Perfluoroheptanoic acid (PFHpA)		0.0045		ug/L	0.0020
03/30/2021 17:42	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
03/30/2021 17:42	Perfluorooctanoic acid (PFOA)		0.0061		ug/L	0.0020
		202103250325 GAC-5-20210325				

SUMMARY OF POSITIVE DATA ONLY

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
03/30/2021 17:51	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
03/30/2021 17:51	Perfluoroheptanoic acid (PFHpA)		0.0035		ug/L	0.0020
03/30/2021 17:51	Perfluorohexanesulfonic acid (PFHxS)		0.0042		ug/L	0.0020
03/30/2021 17:51	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
03/30/2021 17:51	Perfluorononanoic acid (PFNA)		0.0021		ug/L	0.0020
03/30/2021 17:51	Perfluorooctanesulfonic acid (PFOS)		0.013		ug/L	0.0020
03/30/2021 17:51	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		202103250326 <u>GAC-6-20210325</u>				
03/30/2021 18:01	Perfluorobutanesulfonic acid (PFBS)		0.013		ug/L	0.0020
03/30/2021 18:01	Perfluoroheptanoic acid (PFHpA)		0.0055		ug/L	0.0020
03/30/2021 18:01	Perfluorohexanesulfonic acid (PFHxS)		0.0067		ug/L	0.0020
03/30/2021 18:01	Perfluorohexanoic acid (PFHxA)		0.0079		ug/L	0.0020
03/30/2021 18:01	Perfluorooctanesulfonic acid (PFOS)		0.0022		ug/L	0.0020
03/30/2021 18:01	Perfluorooctanoic acid (PFOA)		0.017		ug/L	0.0020
		202103250327 <u>GAC-7-20210325</u>				
03/30/2021 18:11	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
03/30/2021 18:11	Perfluoroheptanoic acid (PFHpA)		0.0045		ug/L	0.0020
03/30/2021 18:11	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
03/30/2021 18:11	Perfluorohexanoic acid (PFHxA)		0.0076		ug/L	0.0020
03/30/2021 18:11	Perfluorononanoic acid (PFNA)		0.0027		ug/L	0.0020
03/30/2021 18:11	Perfluorooctanesulfonic acid (PFOS)		0.016		ug/L	0.0020
03/30/2021 18:11	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
		202103250328 <u>GAC-8-20210325</u>				
03/30/2021 18:20	Perfluorobutanesulfonic acid (PFBS)		0.0096		ug/L	0.0020
03/30/2021 18:20	Perfluoroheptanoic acid (PFHpA)		0.0029		ug/L	0.0020
03/30/2021 18:20	Perfluorohexanesulfonic acid (PFHxS)		0.0026		ug/L	0.0020
03/30/2021 18:20	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
03/30/2021 18:20	Perfluorooctanesulfonic acid (PFOS)		0.0064		ug/L	0.0020
03/30/2021 18:20	Perfluorooctanoic acid (PFOA)		0.0075		ug/L	0.0020
		202103250329 <u>IX-5M-20210325</u>				
03/30/2021 18:30	Perfluorobutanesulfonic acid (PFBS)		0.0035		ug/L	0.0020
03/30/2021 18:30	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
03/30/2021 18:30	Perfluorohexanoic acid (PFHxA)		0.0060		ug/L	0.0020
03/30/2021 18:30	Perfluorononanoic acid (PFNA)		0.0021		ug/L	0.0020
03/30/2021 18:30	Perfluorooctanesulfonic acid (PFOS)		0.0052		ug/L	0.0020
03/30/2021 18:30	Perfluorooctanoic acid (PFOA)		0.0096		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202103250330 <u>IX-6M-20210325</u>						
03/30/2021 18:39	Perfluorobutanesulfonic acid (PFBS)		0.0040		ug/L	0.0020
03/30/2021 18:39	Perfluoroheptanoic acid (PFHpA)		0.0031		ug/L	0.0020
03/30/2021 18:39	Perfluorohexanoic acid (PFHxA)		0.0054		ug/L	0.0020
03/30/2021 18:39	Perfluorononanoic acid (PFNA)		0.0020		ug/L	0.0020
03/30/2021 18:39	Perfluorooctanesulfonic acid (PFOS)		0.0030		ug/L	0.0020
03/30/2021 18:39	Perfluorooctanoic acid (PFOA)		0.010		ug/L	0.0020
202103250331 <u>IX-7M-20210325</u>						
03/30/2021 19:00	Perfluorobutanesulfonic acid (PFBS)		0.0087		ug/L	0.0020
03/30/2021 19:00	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
03/30/2021 19:00	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
03/30/2021 19:00	Perfluorononanoic acid (PFNA)		0.0028		ug/L	0.0020
03/30/2021 19:00	Perfluorooctanesulfonic acid (PFOS)		0.0058		ug/L	0.0020
03/30/2021 19:00	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
202103250332 <u>IX-8M-20210325</u>						
03/30/2021 19:11	Perfluorobutanesulfonic acid (PFBS)		0.0056		ug/L	0.0020
03/30/2021 19:11	Perfluoroheptanoic acid (PFHpA)		0.0041		ug/L	0.0020
03/30/2021 19:11	Perfluorohexanoic acid (PFHxA)		0.0067		ug/L	0.0020
03/30/2021 19:11	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
03/30/2021 19:11	Perfluorooctanesulfonic acid (PFOS)		0.0032		ug/L	0.0020
03/30/2021 19:11	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
202103250333 <u>GAC-5M-20210325</u>						
03/30/2021 19:20	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
03/30/2021 19:20	Perfluoroheptanoic acid (PFHpA)		0.0037		ug/L	0.0020
03/30/2021 19:20	Perfluorohexanesulfonic acid (PFHxS)		0.0060		ug/L	0.0020
03/30/2021 19:20	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
03/30/2021 19:20	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
03/30/2021 19:20	Perfluorooctanesulfonic acid (PFOS)		0.025		ug/L	0.0020
03/30/2021 19:20	Perfluorooctanoic acid (PFOA)		0.014		ug/L	0.0020
202103250334 <u>GAC-6M-20210325</u>						
03/30/2021 19:30	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
03/30/2021 19:30	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
03/30/2021 19:30	Perfluorohexanesulfonic acid (PFHxS)		0.0073		ug/L	0.0020
03/30/2021 19:30	Perfluorohexanoic acid (PFHxA)		0.0066		ug/L	0.0020
03/30/2021 19:30	Perfluorononanoic acid (PFNA)		0.0035		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
03/30/2021 19:30	Perfluorooctanesulfonic acid (PFOS)		0.026		ug/L	0.0020
03/30/2021 19:30	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
		202103250335 GAC-7M-20210325				
03/30/2021 19:40	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
03/30/2021 19:40	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
03/30/2021 19:40	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
03/30/2021 19:40	Perfluorohexanoic acid (PFHxA)		0.0063		ug/L	0.0020
03/30/2021 19:40	Perfluorononanoic acid (PFNA)		0.0035		ug/L	0.0020
03/30/2021 19:40	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
03/30/2021 19:40	Perfluorooctanoic acid (PFOA)		0.016		ug/L	0.0020
		202103250336 GAC-8M-20210325				
03/30/2021 19:49	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
03/30/2021 19:49	Perfluoroheptanoic acid (PFHpA)		0.0032		ug/L	0.0020
03/30/2021 19:49	Perfluorohexanesulfonic acid (PFHxS)		0.0049		ug/L	0.0020
03/30/2021 19:49	Perfluorohexanoic acid (PFHxA)		0.0070		ug/L	0.0020
03/30/2021 19:49	Perfluorononanoic acid (PFNA)		0.0024		ug/L	0.0020
03/30/2021 19:49	Perfluorooctanesulfonic acid (PFOS)		0.020		ug/L	0.0020
03/30/2021 19:49	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
		202103250337 MB-INF--20210325				
04/14/2021 23:47	Alkalinity in CaCO3 units		160		mg/L	2.0
03/30/2021 23:47	Arsenic Total ICAP/MS		1.4	10	ug/L	1.0
04/02/2021 4:44	Calcium Total ICAP		63		mg/L	1.0
03/26/2021 03:21	Chloride		50	250	mg/L	2.5
03/30/2021 15:38	Dissolved Organic Carbon		0.76		mg/L	0.20
04/01/2021 13:59	Hexavalent chromium(Dissolved)		0.46		ug/L	0.020
04/02/2021 4:44	Magnesium Total ICAP		12		mg/L	0.10
03/26/2021 03:21	Nitrate as Nitrogen by IC		2.6	10	mg/L	0.50
03/26/2021 03:21	Nitrate as NO3 (calc)		11	45	mg/L	2.2
03/30/2021 19:59	Perfluorobutanesulfonic acid (PFBS)		0.010		ug/L	0.0020
03/30/2021 19:59	Perfluorodecanoic acid (PFDA)		0.0020		ug/L	0.0020
03/30/2021 19:59	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
03/30/2021 19:59	Perfluorohexanesulfonic acid (PFHxS)		0.0068		ug/L	0.0020
03/30/2021 19:59	Perfluorohexanoic acid (PFHxA)		0.0064		ug/L	0.0020
03/30/2021 19:59	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
03/30/2021 19:59	Perfluorooctanesulfonic acid (PFOS)		0.042		ug/L	0.0020
03/30/2021 19:59	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
04/02/2021 4:44	Potassium Total ICAP		3.8		mg/L	1.0
04/02/2021 4:44	Sodium Total ICAP		52		mg/L	1.0
03/26/2021 03:21	Sulfate		72	250	mg/L	2.5
04/01/2021 01:09	Total Dissolved Solids (TDS)		390	500	mg/L	10
04/02/2021 05:51	Total Hardness as CaCO3 by ICP (calc)		210		mg/L	3.0
03/26/2021 03:21	Total Nitrate, Nitrite-N, CALC		2.6		mg/L	0.10
03/31/2021 17:29	Total Organic Carbon		1.0		mg/L	0.20
03/29/2021 14:29	Uranium by ICPMS as pCi/L		1.2		pCi/L	0.70
03/26/2021 22:42	Uranium ICAP/MS		1.9	30	ug/L	1.0

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Report: 925810
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Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20210325 (202103250304)					Sampled on 03/25/2021 1004				
EPA 537.1 - EPA Method 537.1									
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	13C2-PFDA	101	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	13C2-PFHxA	111	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	113	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	105	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	105	%		1
03/27/21	03/30/21 00:20	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	114	%		1

GAC-2-20210325 (202103250305)					Sampled on 03/25/2021 1007				
EPA 537.1 - EPA Method 537.1									
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	13C2-PFDA	102	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	13C2-PFHxA	115	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	110	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	108	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	104	%		1
03/27/21	03/30/21 00:39	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	114	%		1

GAC-3-20210325 (202103250306)

Sampled on 03/25/2021 1010

EPA 537.1 - EPA Method 537.1

03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0036	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0022	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	13C2-PFDA	108	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	13C2-PFHxA	117	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	108	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	109	%		1
03/27/21	03/30/21 03:05	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	115	%		1

GAC-4-20210325 (202103250307)

Sampled on 03/25/2021 1013

EPA 537.1 - EPA Method 537.1

03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	13C2-PFDA	103	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	13C2-PFHxA	115	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	109	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	110	%		1
03/27/21	03/30/21 03:15	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	112	%		1

IX-1--20210325 (202103250308)

Sampled on 03/25/2021 1016

EPA 537.1 - EPA Method 537.1

03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUNA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	13C2-PFDA	111	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	13C2-PFHxA	122	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	114	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	108	%		1
03/27/21	03/30/21 03:25	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	115	%		1

IX-2-20210325 (202103250309)

Sampled on 03/25/2021 1019

EPA 537.1 - EPA Method 537.1

03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0030	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	13C2-PFDA	109	%		1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	13C2-PFHxA	122	%		1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	110	%		1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	107	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/27/21	03/30/21 03:34	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	119	%		1
IX-3-20210325 (202103250310)					Sampled on 03/25/2021 1022				
EPA 537.1 - EPA Method 537.1									
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0066	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	13C2-PFDA	109	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	13C2-PFHxA	120	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	13C3-HFPO-DA	110	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	d3-NMeFOSAA	108	%		1
03/27/21	03/30/21 03:44	1316762	1317175	(EPA 537.1)	d5-NEtFOSAA	114	%		1

IX-4-20210325 (202103250311)					Sampled on 03/25/2021 1025				
EPA 537.1 - EPA Method 537.1									
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0028	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	13C2-PFDA	90	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	13C2-PFHxA	97	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	96	%		1
03/29/21	03/30/21 14:06	1316897	1317597	(EPA 537.1)	d5-NETFOSAA	93	%		1

GAC-1M-20210325 (202103250312)

Sampled on 03/25/2021 1028

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0062	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0084	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0079	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	13C2-PFDA	94	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	94	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	98	%		1
03/29/21	03/30/21 14:17	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	98	%		1

GAC-2M-20210325 (202103250313)

Sampled on 03/25/2021 1031

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0052	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0032	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0029	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	13C2-PFHxA	99	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	97	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	102	%		1
03/29/21	03/30/21 14:27	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	93	%		1

GAC-3M-20210325 (202103250314)

Sampled on 03/25/2021 1034

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0080	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0085	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	13C2-PFDA	98	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	13C2-PFHxA	102	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	100	%		1
03/29/21	03/30/21 14:36	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	91	%		1

GAC-4M-20210325 (202103250315)

Sampled on 03/25/2021 1037

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0026	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0036	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	96	%		1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	97	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 12:00	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	93	%		1
IX-1M-20210325 (202103250316)					Sampled on 03/25/2021 1040				
EPA 537.1 - EPA Method 537.1									
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0022	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0031	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0053	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0074	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	13C2-PFDA	94	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	13C2-PFHxA	99	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	96	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	97	%		1
03/29/21	03/30/21 12:19	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	95	%		1

IX-2M-20210325 (202103250317)

Sampled on 03/25/2021 1043

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0026	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0020	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0087	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	13C2-PFHxA	97	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	98	%		1
03/29/21	03/30/21 14:46	1316897	1317597	(EPA 537.1)	d5-NETFOSAA	91	%		1

IX-3M-20210325 (202103250318)

Sampled on 03/25/2021 1046

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0036	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0028	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0087	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	13C2-PFDA	96	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	98	%		1
03/29/21	03/30/21 14:56	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	95	%		1

IX-4M-20210325 (202103250319)

Sampled on 03/25/2021 1049

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0048	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0022	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0044	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	13C2-PFDA	90	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	13C2-PFHxA	96	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	99	%		1
03/29/21	03/30/21 15:05	1316897	1317597	(EPA 537.1)	d5-NEFOSAA	91	%		1

LH-INF-20210325 (202103250320)

Sampled on 03/25/2021 1052

EPA 200.8 - ICPMS Metals

03/26/21	03/30/21 23:44	1316527	1317344	(EPA 200.8)	Arsenic Total ICAP/MS	2.6	ug/L	1.0	1
03/26/21	03/26/21 22:33	1316527	1316698	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
03/26/21	03/26/21 22:33	1316527	1316698	(EPA 200.8)	Uranium ICAP/MS	4.9	ug/L	1.0	1

EPA 200.7 - ICP Metals

03/26/21	04/02/21 4:43	1316527	1318038	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
03/26/21	04/02/21 4:43	1316527	1318038	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.010	1
03/26/21	04/02/21 4:43	1316527	1318038	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
03/26/21	04/02/21 4:43	1316527	1318038	(EPA 200.7)	Potassium Total ICAP	4.6	mg/L	1.0	1
03/26/21	04/02/21 4:43	1316527	1318038	(EPA 200.7)	Sodium Total ICAP	70	mg/L	1.0	1

SM 5310C - Total Organic Carbon

	03/31/21 17:11		1317581	(SM 5310C)	Total Organic Carbon	0.95	mg/L	0.20	1
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SM 5310C - Dissolved Organic Carbon

03/26/21	03/30/21 15:16	1316507	1317205	(SM 5310C)	Dissolved Organic Carbon	0.63	mg/L	0.20	1
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EPA 200.8 - Uranium by ICPMS as pCi/L

	03/29/21 14:29			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.3 (c)	pCi/L	0.70	1
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SM 2340B - Total Hardness as CaCO3 by ICP

	04/02/21 05:51			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
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EPA 218.6 - Hexavalent chromium(Dissolved)

	04/05/21 12:26		1318504	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.86	ug/L	0.020	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

	03/26/21 02:42		1316448	(EPA 300.0)	Nitrate as Nitrogen by IC	3.0	mg/L	0.50	5
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Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	03/26/21 02:42		1316448	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
	03/26/21 02:42		1316448	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	03/26/21 02:42		1316448	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	3.0	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	03/26/21 02:42		1316449	(EPA 300.0)	Chloride	110 (B4)	mg/L	2.5	5
	03/26/21 02:42		1316449	(EPA 300.0)	Sulfate	160	mg/L	2.5	5
EPA 314.0 - Perchlorate with 2 ug/L MRL									
	03/26/21 19:02	(1)	1317011	(EPA 314.0)	Perchlorate- Low Level	ND	ug/L	2.0	1
EPA 537.1 - EPA Method 537.1									
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0072	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0063	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0030	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	13C2-PFDA	94	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	13C2-PFHxA	101	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	101	%		1
03/29/21	03/30/21 15:15	1316897	1317597	(EPA 537.1)	d5-NetFOSAA	91	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 1664 - Oil and Grease by 1664(subbed)									
	03/31/21 17:11			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.956	1
EPA 524.2 - Volatile Organics by GCMS									
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromoform	ND (LM)	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Carbon Tetrachloride	ND (LM)	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Chloroform (Trichloromethane)	0.74	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Total THM	0.74	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	1,2-Dichloroethane-d4	100	%		1
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	4-Bromofluorobenzene	101	%		1

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/01/21	04/01/21 16:14	1318057	1318059	(EPA 524.2)	Toluene-d8	97	%		1
SM 2320B - Alkalinity in CaCO3 units									
	04/13/21 00:11		1320231	(SM 2320B)	Alkalinity in CaCO3 units	200 (H1)	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
03/31/21	04/01/21 01:08	1317655	1317659	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	640	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	04/02/21 16:13		1318035	(SM 2540D)	Total Suspended Solids (TSS)	ND (H1)	mg/L	10	1
<u>IX-5-20210325 (202103250321)</u>						Sampled on 03/25/2021 1204			
EPA 537.1 - EPA Method 537.1									
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0062	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	13C2-PFDA	88	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	13C2-PFHxA	94	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	90	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	96	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	94	%		1
03/29/21	03/30/21 15:25	1316897	1317597	(EPA 537.1)	d5-NetFOSAA	92	%		1

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
IX-6-20210325 (202103250322)					Sampled on 03/25/2021 1207				
EPA 537.1 - EPA Method 537.1									
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0073	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0045	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	13C2-PFDA	90	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	d3-NMeFOSAA	96	%		1
03/29/21	03/30/21 15:34	1316897	1317597	(EPA 537.1)	d5-NEtFOSAA	93	%		1

IX-7-20210325 (202103250323)					Sampled on 03/25/2021 1210				
EPA 537.1 - EPA Method 537.1									
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
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 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0045	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	13C2-PFDA	88	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	13C2-PFHxA	93	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	89	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	103	%		1
03/29/21	03/30/21 17:32	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	90	%		1

IX-8-20210325 (202103250324)

Sampled on 03/25/2021 1213

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0045	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0061	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	13C2-PFDA	81	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	13C2-PFHxA	92	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	86	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	100	%		1
03/29/21	03/30/21 17:42	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	86	%		1

GAC-5-20210325 (202103250325)

Sampled on 03/25/2021 1216

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0035	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0042	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0021	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.013	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	13C2-PFDA	83	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	13C2-PFHxA	88	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	84	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	105	%		1
03/29/21	03/30/21 17:51	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	88	%		1

GAC-6-20210325 (202103250326)

Sampled on 03/25/2021 1219

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.013	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0055	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0067	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0079	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0022	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.017	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	102	%		1
03/29/21	03/30/21 18:01	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	88	%		1

GAC-7-20210325 (202103250327)

Sampled on 03/25/2021 1222

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0045	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0076	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0027	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.016	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	13C2-PFHxA	99	%		1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	95	%		1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	102	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 18:11	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	90	%		1
GAC-8-20210325 (202103250328)					Sampled on 03/25/2021 1225				
EPA 537.1 - EPA Method 537.1									
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0096	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0029	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0026	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0064	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0075	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	13C2-PFDA	88	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	91	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	102	%		1
03/29/21	03/30/21 18:20	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	92	%		1

IX-5M-20210325 (202103250329)

Sampled on 03/25/2021 1403

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0035	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0060	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0021	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0052	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0096	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	13C2-PFDA	91	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	13C2-PFHxA	94	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	90	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	101	%		1
03/29/21	03/30/21 18:30	1316910	1317598	(EPA 537.1)	d5-NETFOSAA	94	%		1

IX-6M-20210325 (202103250330)

Sampled on 03/25/2021 1406

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0031	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0054	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0020	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0030	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.010	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	13C2-PFDA	94	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	13C2-PFHxA	101	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	102	%		1
03/29/21	03/30/21 18:39	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	91	%		1

IX-7M-20210325 (202103250331)

Sampled on 03/25/2021 1409

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0087	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0028	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0058	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	13C2-PFDA	88	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	13C2-PFHxA	95	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	88	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	96	%		1
03/29/21	03/30/21 19:00	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	96	%		1

IX-8M-20210325 (202103250332)

Sampled on 03/25/2021 1412

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0056	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0041	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0067	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	13C2-PFDA	94	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	13C2-PFHxA	99	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	103	%		1
03/29/21	03/30/21 19:11	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	94	%		1

GAC-5M-20210325 (202103250333)

Sampled on 03/25/2021 1415

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0037	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0060	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.025	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.014	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	13C2-PFDA	116	%		1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	13C2-PFHxA	122	%		1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	115	%		1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	101	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:20	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	112	%		1
GAC-6M-20210325 (202103250334)					Sampled on 03/25/2021 1418				
EPA 537.1 - EPA Method 537.1									
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0073	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0066	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0035	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.026	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	13C2-PFDA	93	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	13C2-PFHxA	98	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	95	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	101	%		1
03/29/21	03/30/21 19:30	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	95	%		1

GAC-7M-20210325 (202103250335)

Sampled on 03/25/2021 1421

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0063	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0035	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.016	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	13C2-PFDA	91	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	13C2-PFHxA	97	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	93	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	101	%		1
03/29/21	03/30/21 19:40	1316910	1317598	(EPA 537.1)	d5-NETFOSAA	91	%		1

GAC-8M-20210325 (202103250336)

Sampled on 03/25/2021 1424

EPA 537.1 - EPA Method 537.1

03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0032	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0049	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0070	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0024	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.020	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	13C2-PFDA	92	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	13C2-PFHxA	97	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	90	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	102	%		1
03/29/21	03/30/21 19:49	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	93	%		1

MB-INF--20210325 (202103250337)

Sampled on 03/25/2021 1228

EPA 200.8 - ICPMS Metals

03/26/21	03/30/21 23:47	1316527	1317344	(EPA 200.8)	Arsenic Total ICAP/MS	1.4	ug/L	1.0	1
03/26/21	03/26/21 22:42	1316527	1316698	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
03/26/21	03/26/21 22:42	1316527	1316698	(EPA 200.8)	Uranium ICAP/MS	1.9	ug/L	1.0	1

EPA 200.7 - ICP Metals

03/26/21	04/02/21 4:44	1316527	1318038	(EPA 200.7)	Calcium Total ICAP	63	mg/L	1.0	1
03/26/21	04/02/21 4:44	1316527	1318038	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.010	1
03/26/21	04/02/21 4:44	1316527	1318038	(EPA 200.7)	Magnesium Total ICAP	12	mg/L	0.10	1
03/26/21	04/02/21 4:44	1316527	1318038	(EPA 200.7)	Potassium Total ICAP	3.8	mg/L	1.0	1
03/26/21	04/02/21 4:44	1316527	1318038	(EPA 200.7)	Sodium Total ICAP	52	mg/L	1.0	1

SM 5310C - Total Organic Carbon

03/31/21 17:29			1317581	(SM 5310C)	Total Organic Carbon	1.0	mg/L	0.20	1
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SM 5310C - Dissolved Organic Carbon

03/26/21	03/30/21 15:38	1316507	1317205	(SM 5310C)	Dissolved Organic Carbon	0.76	mg/L	0.20	1
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EPA 200.8 - Uranium by ICPMS as pCi/L

03/29/21 14:29				(EPA 200.8)	Uranium by ICPMS as pCi/L	1.2 (c)	pCi/L	0.70	1
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SM 2340B - Total Hardness as CaCO3 by ICP

Rounding on totals after summation.
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	04/02/21 05:51			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	210 (c)	mg/L	3.0	1
EPA 218.6 - Hexavalent chromium(Dissolved)									
	04/01/21 13:59		1318079	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.46	ug/L	0.020	1
EPA 300.0 - Nitrate, Nitrite by EPA 300.0									
	03/26/21 03:21		1316448	(EPA 300.0)	Nitrate as Nitrogen by IC	2.6	mg/L	0.50	5
	03/26/21 03:21		1316448	(EPA 300.0)	Nitrate as NO3 (calc)	11	mg/L	2.2	5
	03/26/21 03:21		1316448	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	03/26/21 03:21		1316448	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	2.6	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	03/26/21 03:21		1316449	(EPA 300.0)	Chloride	50 (B4)	mg/L	2.5	5
	03/26/21 03:21		1316449	(EPA 300.0)	Sulfate	72	mg/L	2.5	5
EPA 314.0 - Perchlorate with 2 ug/L MRL									
	03/26/21 19:27	(1)	1317011	(EPA 314.0)	Perchlorate- Low Level	ND	ug/L	2.0	1
EPA 537.1 - EPA Method 537.1									
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.010	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	0.0020	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0068	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0064	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.042	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	13C2-PFDA	90	%		1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	13C2-PFHxA	95	%		1

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	13C3-HFPO-DA	91	%		1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	d3-NMeFOSAA	103	%		1
03/29/21	03/30/21 19:59	1316910	1317598	(EPA 537.1)	d5-NEtFOSAA	90	%		1
EPA 1664 - Oil and Grease by 1664(subbed)									
	03/31/21 17:11			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	0.971	1
EPA 524.2 - Volatile Organics by GCMS									
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromoform	ND (LM)	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Carbon Tetrachloride	ND (LM)	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Dichlorodifluoromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Toluene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1

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Report: 925810
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 03/25/2021 1620

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	1,2-Dichloroethane-d4	100	%		1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	4-Bromofluorobenzene	99	%		1
04/01/21	04/01/21 16:35	1318057	1318059	(EPA 524.2)	Toluene-d8	98	%		1
SM 2320B - Alkalinity in CaCO3 units									
	04/14/21 23:47		1320930	(SM 2320B)	Alkalinity in CaCO3 units	160 (B7,H1)	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
03/31/21	04/01/21 01:09	1317655	1317659	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	390	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	04/02/21 16:14		1318035	(SM 2540D)	Total Suspended Solids (TSS)	ND (H1)	mg/L	10	1

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Report: 925810
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Group: WRD Pilot [Set #1]

Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1316448

202103250320 LH-INF-20210325
 202103250337 MB-INF--20210325

Analysis Date: 03/26/2021

Analyzed by: A9QW
 Analyzed by: A9QW

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1316449

202103250320 LH-INF-20210325
 202103250337 MB-INF--20210325

Analysis Date: 03/26/2021

Analyzed by: A9QW
 Analyzed by: A9QW

ICPMS Metals

Prep Batch: 1316527 Analytical Batch: 1316698

202103250320 LH-INF-20210325
 202103250337 MB-INF--20210325

Analysis Date: 03/26/2021

Analyzed by: AZS
 Analyzed by: AZS

Perchlorate with 2 ug/L MRL

Analytical Batch: 1317011

202103250320 LH-INF-20210325
 202103250337 MB-INF--20210325

Analysis Date: 03/26/2021

Analyzed by: H5VG
 Analyzed by: H5VG

EPA Method 537.1

Prep Batch: 1316762 Analytical Batch: 1317175

202103250304 GAC-1-20210325
 202103250305 GAC-2-20210325
 202103250306 GAC-3-20210325
 202103250307 GAC-4-20210325
 202103250308 IX-1--20210325
 202103250309 IX-2-20210325
 202103250310 IX-3-20210325

Analysis Date: 03/30/2021

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

Dissolved Organic Carbon

Prep Batch: 1316507 Analytical Batch: 1317205

202103250320 LH-INF-20210325
 202103250337 MB-INF--20210325

Analysis Date: 03/30/2021

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

ICPMS Metals

Prep Batch: 1316527 Analytical Batch: 1317344

202103250320 LH-INF-20210325
 202103250337 MB-INF--20210325

Analysis Date: 03/30/2021

Analyzed by: AZS
 Analyzed by: AZS

Total Organic Carbon

Analytical Batch: 1317581

202103250320 LH-INF-20210325
 202103250337 MB-INF--20210325

Analysis Date: 03/31/2021

Analyzed by: ZB2Z
 Analyzed by: ZB2Z

EPA Method 537.1

Prep Batch: 1316897 Analytical Batch: 1317597

202103250311 IX-4-20210325
 202103250312 GAC-1M-20210325

Analysis Date: 03/30/2021

Analyzed by: Y7BM
 Analyzed by: Y7BM

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Report: 925810
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

202103250313	GAC-2M-20210325	Analyzed by: Y7BM
202103250314	GAC-3M-20210325	Analyzed by: Y7BM
202103250315	GAC-4M-20210325	Analyzed by: Y7BM
202103250316	IX-1M-20210325	Analyzed by: Y7BM
202103250317	IX-2M-20210325	Analyzed by: Y7BM
202103250318	IX-3M-20210325	Analyzed by: Y7BM
202103250319	IX-4M-20210325	Analyzed by: Y7BM
202103250320	LH-INF-20210325	Analyzed by: Y7BM
202103250321	IX-5-20210325	Analyzed by: Y7BM
202103250322	IX-6-20210325	Analyzed by: Y7BM

EPA Method 537.1

Prep Batch: 1316910 Analytical Batch: 1317598

Analysis Date: 03/30/2021

202103250323	IX-7-20210325	Analyzed by: Y7BM
202103250324	IX-8-20210325	Analyzed by: Y7BM
202103250325	GAC-5-20210325	Analyzed by: Y7BM
202103250326	GAC-6-20210325	Analyzed by: Y7BM
202103250327	GAC-7-20210325	Analyzed by: Y7BM
202103250328	GAC-8-20210325	Analyzed by: Y7BM
202103250329	IX-5M-20210325	Analyzed by: Y7BM
202103250330	IX-6M-20210325	Analyzed by: Y7BM
202103250331	IX-7M-20210325	Analyzed by: Y7BM
202103250332	IX-8M-20210325	Analyzed by: Y7BM
202103250333	GAC-5M-20210325	Analyzed by: Y7BM
202103250334	GAC-6M-20210325	Analyzed by: Y7BM
202103250335	GAC-7M-20210325	Analyzed by: Y7BM
202103250336	GAC-8M-20210325	Analyzed by: Y7BM
202103250337	MB-INF--20210325	Analyzed by: Y7BM

Total Dissolved Solids (TDS)

Prep Batch: 1317655 Analytical Batch: 1317659

Analysis Date: 04/01/2021

202103250320	LH-INF-20210325	Analyzed by: TJ52
202103250337	MB-INF--20210325	Analyzed by: TJ52

Total Suspended Solids (TSS)

Analytical Batch: 1318035

Analysis Date: 04/02/2021

202103250320	LH-INF-20210325	Analyzed by: TJ52
202103250337	MB-INF--20210325	Analyzed by: TJ52

ICP Metals

Prep Batch: 1316527 Analytical Batch: 1318038

Analysis Date: 04/02/2021

202103250320	LH-INF-20210325	Analyzed by: Y7TT
202103250337	MB-INF--20210325	Analyzed by: Y7TT

Volatile Organics by GCMS

Prep Batch: 1318057 Analytical Batch: 1318059

Analysis Date: 04/01/2021

202103250320	LH-INF-20210325	Analyzed by: FX5E
202103250337	MB-INF--20210325	Analyzed by: FX5E

Water Replenishment District

Hexavalent chromium(Dissolved)**Analytical Batch: 1318079**

202103250337 MB-INF--20210325

Analysis Date: 04/01/2021

Analyzed by: TLH

Hexavalent chromium(Dissolved)**Analytical Batch: 1318504**

202103250320 LH-INF-20210325

Analysis Date: 04/05/2021

Analyzed by: TLH

Alkalinity in CaCO3 units**Analytical Batch: 1320231**

202103250320 LH-INF-20210325

Analysis Date: 04/13/2021

Analyzed by: ZS6I

Alkalinity in CaCO3 units**Analytical Batch: 1320930**

202103250337 MB-INF--20210325

Analysis Date: 04/14/2021

Analyzed by: ZS6I

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1316448					Analysis Date: 03/26/2021				
LCS1	Nitrate as Nitrogen by IC		2.5	2.50	mg/L	100	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.51	mg/L	100	(90-110)	20	0.40
MBLK	Nitrate as Nitrogen by IC			<0.05	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0489	mg/L	98	(50-150)		
MRLLW	Nitrate as Nitrogen by IC		0.013	0.0120	mg/L	96	(50-150)		
MS_202103250320	Nitrate as Nitrogen by IC	3.0	1.3	9.55	mg/L	105	(80-120)		
MS_202103250351	Nitrate as Nitrogen by IC		1.3	6.50	mg/L	104	(80-120)		
MSD_202103250320	Nitrate as Nitrogen by IC	3.0	1.3	9.59	mg/L	106	(80-120)	20	0.45
MSD_202103250351	Nitrate as Nitrogen by IC		1.3	6.59	mg/L	105	(80-120)	20	1.4
LCS1	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	1.02	mg/L	102	(90-110)	20	0.0
MBLK	Nitrite Nitrogen by IC			<0.025	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0473	mg/L	95	(50-150)		
MRLLW	Nitrite Nitrogen by IC		0.013	0.0114	mg/L	91	(50-150)		
MS_202103250320	Nitrite Nitrogen by IC	ND	0.5	2.61	mg/L	105	(80-120)		
MS_202103250351	Nitrite Nitrogen by IC		0.5	2.52	mg/L	101	(80-120)		
MSD_202103250320	Nitrite Nitrogen by IC	ND	0.5	2.64	mg/L	105	(80-120)	20	1
MSD_202103250351	Nitrite Nitrogen by IC		0.5	2.56	mg/L	102	(80-120)	20	1.5
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1316449					Analysis Date: 03/26/2021				
LCS1	Chloride		25	26.0	mg/L	104	(90-110)		
LCS2	Chloride		25	26.0	mg/L	104	(90-110)	20	0.0
MBLK	Chloride			<0.25	mg/L				
MRL_CHK	Chloride		0.5	0.442	mg/L	89	(50-150)		
MS_202103250320	Chloride	110	13	174	mg/L	108	(80-120)		
MS_202103250351	Chloride		13	238	mg/L	99	(80-120)		
MSD_202103250320	Chloride	110	13	174	mg/L	108	(80-120)	20	0.23
MSD_202103250351	Chloride		13	239	mg/L	100	(80-120)	20	0.22
LCS1	Sulfate		50	51.5	mg/L	103	(90-110)		
LCS2	Sulfate		50	51.7	mg/L	103	(90-110)	20	0.39
MBLK	Sulfate			<0.125	mg/L				
MRL_CHK	Sulfate		1	0.979	mg/L	98	(50-150)		
MRLLW	Sulfate		0.25	0.240	mg/L	96	(50-150)		
MS_202103250320	Sulfate	160	25	299	mg/L	108	(80-120)		
MS_202103250351	Sulfate		25	350	mg/L	107	(80-120)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 925810
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202103250320	Sulfate	160	25	300	mg/L	108	(80-120)	20	0.23
MSD_202103250351	Sulfate		25	352	mg/L	108	(80-120)	20	0.54

ICPMS Metals by EPA 200.8

Analytical Batch: 1316698

Analysis Date: 03/26/2021

LCS1	Arsenic Total ICAP/MS		50	48.9	ug/L	98	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.6	ug/L	97	(85-115)	20	0.62
MBLK	Arsenic Total ICAP/MS			<u>0.343</u>	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	0.682	ug/L	68	(50-150)		
MS_202103240502	Arsenic Total ICAP/MS	ND	50	47.7	ug/L	95	(70-130)		
MS2_202103250320	Arsenic Total ICAP/MS	2.6	50	51.8	ug/L	98	(70-130)		
MSD_202103240502	Arsenic Total ICAP/MS	ND	50	52.8	ug/L	106	(70-130)	20	10
MSD2_202103250320	Arsenic Total ICAP/MS	2.6	50	54.1	ug/L	102	(70-130)	20	4.4
LCS1	Manganese Total ICAP/MS		100	99.1	ug/L	99	(85-115)		
LCS2	Manganese Total ICAP/MS		100	98.6	ug/L	99	(85-115)	20	0.51
MBLK	Manganese Total ICAP/MS			<0.333	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	1.97	ug/L	99	(50-150)		
MS_202103240502	Manganese Total ICAP/MS	16	100	111	ug/L	95	(70-130)		
MS2_202103250320	Manganese Total ICAP/MS	ND	100	94.0	ug/L	94	(70-130)		
MSD_202103240502	Manganese Total ICAP/MS	16	100	122	ug/L	106	(70-130)	20	9.2
MSD2_202103250320	Manganese Total ICAP/MS	ND	100	99.0	ug/L	99	(70-130)	20	5.2
LCS1	Uranium ICAP/MS		50	50.9	ug/L	102	(85-115)		
LCS2	Uranium ICAP/MS		50	50.4	ug/L	101	(85-115)	20	0.99
MBLK	Uranium ICAP/MS			<0.333	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.952	ug/L	95	(50-150)		
MS_202103240502	Uranium ICAP/MS	ND	50	47.5	ug/L	95	(70-130)		
MS2_202103250320	Uranium ICAP/MS	4.9	50	58.3	ug/L	107	(70-130)		
MSD_202103240502	Uranium ICAP/MS	ND	50	53.4	ug/L	107	(70-130)	20	12
MSD2_202103250320	Uranium ICAP/MS	4.9	50	59.1	ug/L	108	(70-130)	20	1.3

Perchlorate with 2 ug/L MRL by EPA 314.0

Analytical Batch: 1317011

Analysis Date: 03/26/2021

LCS1	Perchlorate- Low Level		10	10.8	ug/L	108	(85-115)		
LCS2	Perchlorate- Low Level		10	10.8	ug/L	108	(85-115)	15	0.0
MBLK	Perchlorate- Low Level			<1	ug/L				
MRL_CHK	Perchlorate- Low Level		2	1.88	ug/L	94	(75-125)		
MS2_202103240471	Perchlorate- Low Level	ND	10	9.82	ug/L	98	(80-120)		
MSD2_202103240471	Perchlorate- Low Level	ND	10	9.99	ug/L	100	(80-120)	15	1.7

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1316762 Analytical Batch: 1317175					Analysis Date: 03/29/2021				
DUP_202103250305	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0494	ug/L	105	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0504	ug/L	107	(70-130)	30	2.0
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00195	ug/L	104	(50-150)		
MS2_202103250304	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0496	ug/L	105	(70-130)		
DUP_202103250305	13C2-PFDA (S)			106	%	106	(70-130)		
LCS3	13C2-PFDA (S)		100	116	%	116	(70-130)		
LCS4	13C2-PFDA (S)		100	117	%	117	(70-130)		
MBLK	13C2-PFDA (S)			109	%	109	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	117	%	117	(70-130)		
MS2_202103250304	13C2-PFDA (S)		100	106	%	106	(70-130)		
DUP_202103250305	13C2-PFHxA (S)			115	%	115	(70-130)		
LCS3	13C2-PFHxA (S)		100	122	%	123	(70-130)		
LCS4	13C2-PFHxA (S)		100	125	%	125	(70-130)		
MBLK	13C2-PFHxA (S)			115	%	115	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	128	%	128	(70-130)		
MS2_202103250304	13C2-PFHxA (S)		100	115	%	115	(70-130)		
DUP_202103250305	13C2-PFOA- IS#1 (I)			115	%	115	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	102	%	102	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS2_202103250304	13C2-PFOA- IS#1 (I)		100	110	%	110	(50-150)		
DUP_202103250305	13C3-HFPO-DA (S)			105	%	105	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	115	%	115	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	115	%	115	(70-130)		
MBLK	13C3-HFPO-DA (S)			110	%	110	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	119	%	119	(70-130)		
MS2_202103250304	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
DUP_202103250305	13C4-PFOS- IS#2 (I)			105	%	105	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			106	%	106	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	104	%	104	(50-150)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202103250304	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
DUP_202103250305	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0503	ug/L	104	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0543	ug/L	112	(70-130)	30	7.7
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00214	ug/L	113	(50-150)		
MS2_202103250304	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0504	ug/L	104	(70-130)		
DUP_202103250305	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0524	ug/L	112	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0553	ug/L	119	(70-130)	30	5.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00206	ug/L	111	(50-150)		
MS2_202103250304	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0536	ug/L	115	(70-130)		
DUP_202103250305	d3-NMeFOSAA (I)			107	%	107	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	107	%	107	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	106	%	106	(50-150)		
MBLK	d3-NMeFOSAA (I)			100	%	100	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	108	%	109	(50-150)		
MS2_202103250304	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
DUP_202103250305	d5-NEtFOSAA (S)			115	%	115	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	118	%	118	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	117	%	117	(70-130)		
MBLK	d5-NEtFOSAA (S)			113	%	113	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	122	%	122	(70-130)		
MS2_202103250304	d5-NEtFOSAA (S)		100	114	%	114	(70-130)		
DUP_202103250305	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0538	ug/L	108	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0549	ug/L	110	(70-130)	30	2.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00212	ug/L	106	(50-150)		
MS2_202103250304	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0510	ug/L	102	(70-130)		
DUP_202103250305	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0534	ug/L	107	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0554	ug/L	111	(70-130)	30	3.7
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00206	ug/L	103	(50-150)		
MS2_202103250304	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0550	ug/L	110	(70-130)		
DUP_202103250305	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0513	ug/L	103	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0550	ug/L	110	(70-130)	30	7.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00211	ug/L	106	(50-150)		
MS2_202103250304	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0553	ug/L	111	(70-130)		
DUP_202103250305	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0472	ug/L	107	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0495	ug/L	112	(70-130)	30	4.8
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00190	ug/L	107	(50-150)		
MS2_202103250304	Perfluorobutanesulfonic acid (PFBS)	ND	0.044	0.0491	ug/L	108	(70-130)		
DUP_202103250305	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0536	ug/L	107	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0559	ug/L	112	(70-130)	30	4.2
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00214	ug/L	107	(50-150)		
MS2_202103250304	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0516	ug/L	103	(70-130)		
DUP_202103250305	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0568	ug/L	114	(70-130)	30	8.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00207	ug/L	104	(50-150)		
MS2_202103250304	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0495	ug/L	99	(70-130)		
DUP_202103250305	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0540	ug/L	108	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0592	ug/L	118	(70-130)	30	9.2
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00233	ug/L	117	(50-150)		
MS2_202103250304	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0545	ug/L	108	(70-130)		
DUP_202103250305	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0503	ug/L	110	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0521	ug/L	114	(70-130)	30	3.5
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00203	ug/L	111	(50-150)		
MS2_202103250304	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0506	ug/L	110	(70-130)		
DUP_202103250305	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0570	ug/L	114	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0595	ug/L	119	(70-130)	30	4.1

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00233	ug/L	117	(50-150)		
MS2_202103250304	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0563	ug/L	109	(70-130)		
DUP_202103250305	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0551	ug/L	110	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0603	ug/L	121	(70-130)	30	9.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00233	ug/L	116	(50-150)		
MS2_202103250304	Perfluorononanoic acid (PFNA)	ND	0.05	0.0542	ug/L	108	(70-130)		
DUP_202103250305	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0516	ug/L	112	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0528	ug/L	114	(70-130)	30	2.3
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00205	ug/L	111	(50-150)		
MS2_202103250304	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0521	ug/L	112	(70-130)		
DUP_202103250305	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0532	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0561	ug/L	112	(70-130)	30	5.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00251	ug/L	126	(50-150)		
MS2_202103250304	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0571	ug/L	113	(70-130)		
DUP_202103250305	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0561	ug/L	112	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0608	ug/L	122	(70-130)	30	8.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00276	ug/L	138	(50-150)		
MS2_202103250304	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0550	ug/L	109	(70-130)		
DUP_202103250305	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0519	ug/L	104	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0552	ug/L	111	(70-130)	30	6.3
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00212	ug/L	106	(50-150)		
MS2_202103250304	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0495	ug/L	99	(70-130)		
DUP_202103250305	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0507	ug/L	101	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0560	ug/L	112	(70-130)	30	9.9
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00204	ug/L	102	(50-150)		

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS2_202103250304	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0482	ug/L	96	(70-130)		

Dissolved Organic Carbon by SM 5310C

Analytical Batch: 1317205

Analysis Date: 03/30/2021

LCS1	Dissolved Organic Carbon		5	5.36	mg/L	107	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.43	mg/L	109	(90-110)	20	1.3
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.225	mg/L	113	(50-150)		
MS_202103310128	Dissolved Organic Carbon	0.32	4	4.68	mg/L	109	(80-120)		
MSD_202103310128	Dissolved Organic Carbon	0.32	4	4.71	mg/L	110	(80-120)	20	0.53

ICPMS Metals by EPA 200.8

Analytical Batch: 1317344

Analysis Date: 03/30/2021

LCS1	Arsenic Total ICAP/MS		50	46.4	ug/L	93	(85-115)		
LCS2	Arsenic Total ICAP/MS		50	48.1	ug/L	96	(85-115)	20	3.4
MBLK	Arsenic Total ICAP/MS			<0.333	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1	1.22	ug/L	122	(50-150)		
MS_202103180628	Arsenic Total ICAP/MS	ND	50	51.2	ug/L	102	(70-130)		
MS2_202103260068	Arsenic Total ICAP/MS	ND	50	47.4	ug/L	94	(70-130)		
MSD_202103180628	Arsenic Total ICAP/MS	ND	50	50.2	ug/L	100	(70-130)	20	2.0
MSD2_202103260068	Arsenic Total ICAP/MS	ND	50	51.6	ug/L	102	(70-130)	20	8.5
LCS1	Manganese Total ICAP/MS		100	102	ug/L	102	(85-115)		
LCS2	Manganese Total ICAP/MS		100	102	ug/L	102	(85-115)	20	0.0
MBLK	Manganese Total ICAP/MS			<0.333	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	1.93	ug/L	97	(50-150)		
MS_202103180628	Manganese Total ICAP/MS	31	100	130	ug/L	130	(70-130)		
MS2_202103260068	Manganese Total ICAP/MS	ND	100	94.7	ug/L	95	(70-130)		
MSD_202103180628	Manganese Total ICAP/MS	31	100	129	ug/L	129	(70-130)	20	1.1
MSD2_202103260068	Manganese Total ICAP/MS	ND	100	104	ug/L	104	(70-130)	20	9.3
LCS1	Uranium ICAP/MS		50	51.4	ug/L	103	(85-115)		
LCS2	Uranium ICAP/MS		50	52.0	ug/L	104	(85-115)	20	1.2
MBLK	Uranium ICAP/MS			<0.333	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.930	ug/L	93	(50-150)		
MS_202103180628	Uranium ICAP/MS	ND	50	56.0	ug/L	112	(70-130)		
MS2_202103260068	Uranium ICAP/MS	ND	50	51.4	ug/L	102	(70-130)		
MSD_202103180628	Uranium ICAP/MS	ND	50	54.3	ug/L	109	(70-130)	20	3.1
MSD2_202103260068	Uranium ICAP/MS	ND	50	55.7	ug/L	111	(70-130)	20	8.0

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Total Organic Carbon by SM 5310C									
Analytical Batch: 1317581					Analysis Date: 03/31/2021				
LCS1	Total Organic Carbon		5	5.11	mg/L	102	(90-110)		
LCS2	Total Organic Carbon		5	5.08	mg/L	102	(90-110)	20	0.59
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.264	mg/L	132	(50-150)		
MS_202103250366	Total Organic Carbon	1.1	4	5.05	mg/L	99	(80-120)		
MS2_202103260267	Total Organic Carbon	1.8	2	3.71	mg/L	95	(80-120)		
MSD_202103250366	Total Organic Carbon	1.1	4	5.08	mg/L	100	(80-120)	20	0.65
MSD2_202103260267	Total Organic Carbon	1.8	2	3.71	mg/L	95	(80-120)	20	0.054

EPA Method 537.1 by EPA 537.1

Prep Batch: 1316897 Analytical Batch: 1317597

Analysis Date: 03/30/2021

DUP_202103250316	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0256	ug/L	109	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0257	ug/L	109	(70-130)	30	0.39
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00183	ug/L	97	(50-150)		
MS1_202103250315	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0265	ug/L	112	(70-130)		
DUP_202103250316	13C2-PFDA (S)			93.6	%	94	(70-130)		
LCS1	13C2-PFDA (S)		100	90.9	%	91	(70-130)		
LCS2	13C2-PFDA (S)		100	94.6	%	95	(70-130)		
MBLK	13C2-PFDA (S)			97.4	%	97	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	91.8	%	92	(70-130)		
MS1_202103250315	13C2-PFDA (S)		100	93.8	%	94	(70-130)		
DUP_202103250316	13C2-PFHxA (S)			98.0	%	98	(70-130)		
LCS1	13C2-PFHxA (S)		100	99.1	%	99	(70-130)		
LCS2	13C2-PFHxA (S)		100	97.4	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			97.2	%	97	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	97.3	%	97	(70-130)		
MS1_202103250315	13C2-PFHxA (S)		100	102	%	103	(70-130)		
DUP_202103250316	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
LCS1	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	99.4	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			105	%	105	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MS1_202103250315	13C2-PFOA- IS#1 (I)		100	101	%	101	(50-150)		
DUP_202103250316	13C3-HFPO-DA (S)			94.9	%	95	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	13C3-HFPO-DA (S)		100	95.5	%	95	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	96.9	%	97	(70-130)		
MBLK	13C3-HFPO-DA (S)			96.5	%	97	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	97.3	%	97	(70-130)		
MS1_202103250315	13C3-HFPO-DA (S)		100	97.4	%	97	(70-130)		
DUP_202103250316	13C4-PFOS- IS#2 (I)			102	%	103	(50-150)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.5	%	99	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	99.1	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MS1_202103250315	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
DUP_202103250316	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0278	ug/L	118	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0276	ug/L	117	(70-130)	30	1.1
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00212	ug/L	112	(50-150)		
MS1_202103250315	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0293	ug/L	124	(70-130)		
DUP_202103250316	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0269	ug/L	115	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0260	ug/L	111	(70-130)	30	3.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00205	ug/L	110	(50-150)		
MS1_202103250315	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0260	ug/L	112	(70-130)		
DUP_202103250316	d3-NMeFOSAA (I)			98.9	%	99	(50-150)		
LCS1	d3-NMeFOSAA (I)		100	98.2	%	98	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	96.1	%	96	(50-150)		
MBLK	d3-NMeFOSAA (I)			94.6	%	95	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
MS1_202103250315	d3-NMeFOSAA (I)		100	97.2	%	97	(50-150)		
DUP_202103250316	d5-NEtFOSAA (S)			93.4	%	93	(70-130)		
LCS1	d5-NEtFOSAA (S)		100	92.9	%	93	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	92.7	%	93	(70-130)		
MBLK	d5-NEtFOSAA (S)			95.6	%	96	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	92.9	%	93	(70-130)		
MS1_202103250315	d5-NEtFOSAA (S)		100	93.2	%	93	(70-130)		
DUP_202103250316	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0279	ug/L	112	(70-130)	30	1.4

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00220	ug/L	110	(50-150)		
MS1_202103250315	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0294	ug/L	118	(70-130)		
DUP_202103250316	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0279	ug/L	112	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0282	ug/L	113	(70-130)	30	1.1
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00209	ug/L	105	(50-150)		
MS1_202103250315	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0287	ug/L	115	(70-130)		
DUP_202103250316	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0287	ug/L	115	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0287	ug/L	115	(70-130)	30	0.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00216	ug/L	108	(50-150)		
MS1_202103250315	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0287	ug/L	115	(70-130)		
DUP_202103250316	Perfluorobutanesulfonic acid (PFBS)	0.0022		ND	ug/L		(0-30)		
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0253	ug/L	114	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0249	ug/L	113	(70-130)	30	1.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00202	ug/L	114	(50-150)		
MS1_202103250315	Perfluorobutanesulfonic acid (PFBS)	0.0026	0.022	0.0287	ug/L	118	(70-130)		
DUP_202103250316	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0283	ug/L	113	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0281	ug/L	113	(70-130)	30	0.71
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00225	ug/L	113	(50-150)		
MS1_202103250315	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0301	ug/L	120	(70-130)		
DUP_202103250316	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0284	ug/L	113	(70-130)	30	2.1
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00205	ug/L	102	(50-150)		
MS1_202103250315	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0288	ug/L	115	(70-130)		
DUP_202103250316	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0298	ug/L	119	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0290	ug/L	116	(70-130)	30	2.7
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00233	ug/L	116	(50-150)		

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202103250315	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0305	ug/L	120	(70-130)		
DUP_202103250316	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0272	ug/L	119	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0267	ug/L	117	(70-130)	30	1.9
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00216	ug/L	119	(50-150)		
MS1_202103250315	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0283	ug/L	118	(70-130)		
DUP_202103250316	Perfluorohexanoic acid (PFHxA)	0.0031		0.00288	ug/L		(0-30)		
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0312	ug/L	125	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0305	ug/L	122	(70-130)	30	2.3
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00236	ug/L	118	(50-150)		
MS1_202103250315	Perfluorohexanoic acid (PFHxA)	ND	0.025	0.0329	ug/L	124	(70-130)		
DUP_202103250316	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0301	ug/L	120	(70-130)	30	3.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00240	ug/L	120	(50-150)		
MS1_202103250315	Perfluorononanoic acid (PFNA)	ND	0.025	0.0312	ug/L	123	(70-130)		
DUP_202103250316	Perfluorooctanesulfonic acid (PFOS)	0.0053		0.00448	ug/L		(0-30)		
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0268	ug/L	116	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0266	ug/L	115	(70-130)	30	0.75
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00215	ug/L	116	(50-150)		
MS1_202103250315	Perfluorooctanesulfonic acid (PFOS)	0.0036	0.023	0.0302	ug/L	115	(70-130)		
DUP_202103250316	Perfluorooctanoic acid (PFOA)	0.0074		0.00669	ug/L		(0-30)	30	11
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0283	ug/L	113	(70-130)	30	3.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00244	ug/L	122	(50-150)		
MS1_202103250315	Perfluorooctanoic acid (PFOA)	0.0032	0.025	0.0329	ug/L	119	(70-130)		
DUP_202103250316	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0287	ug/L	115	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0279	ug/L	112	(70-130)	30	2.8
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00246	ug/L	123	(50-150)		
MS1_202103250315	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0300	ug/L	118	(70-130)		
DUP_202103250316	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
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 (S) - Indicates surrogate compound.
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0267	ug/L	107	(70-130)	30	0.38
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00196	ug/L	98	(50-150)		
MS1_202103250315	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0271	ug/L	109	(70-130)		
DUP_202103250316	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0268	ug/L	107	(70-130)	30	1.1
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00198	ug/L	99	(50-150)		
MS1_202103250315	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0276	ug/L	110	(70-130)		

EPA Method 537.1 by EPA 537.1

Prep Batch: 1316910 Analytical Batch: 1317598

Analysis Date: 03/30/2021

DUP_202103250412	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0474	ug/L	101	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0477	ug/L	101	(70-130)	30	0.63
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00201	ug/L	107	(50-150)		
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00208	ug/L	111	(50-150)		
MS2_202103250410	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.047	0.0458	ug/L	97	(70-130)		
DUP_202103250412	13C2-PFDA (S)			93.3	%	93	(70-130)		
LCS3	13C2-PFDA (S)		100	98.1	%	98	(70-130)		
LCS4	13C2-PFDA (S)		100	95.0	%	95	(70-130)		
MBLK	13C2-PFDA (S)			97.9	%	98	(70-130)		
MBLK	13C2-PFDA (S)			94.3	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	93.7	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	92.0	%	92	(70-130)		
MS2_202103250410	13C2-PFDA (S)		100	92.6	%	93	(70-130)		
DUP_202103250412	13C2-PFHxA (S)			101	%	101	(70-130)		
LCS3	13C2-PFHxA (S)		100	101	%	101	(70-130)		
LCS4	13C2-PFHxA (S)		100	99.5	%	100	(70-130)		
MBLK	13C2-PFHxA (S)			97.0	%	97	(70-130)		
MBLK	13C2-PFHxA (S)			96.1	%	96	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	95.0	%	95	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	95.7	%	96	(70-130)		
MS2_202103250410	13C2-PFHxA (S)		100	98.0	%	98	(70-130)		

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202103250412	13C2-PFOA- IS#1 (I)			108	%	108	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	102	%	103	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			104	%	104	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			106	%	106	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS2_202103250410	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
DUP_202103250412	13C3-HFPO-DA (S)			94.4	%	94	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	95.5	%	96	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	94.4	%	94	(70-130)		
MBLK	13C3-HFPO-DA (S)			95.2	%	95	(70-130)		
MBLK	13C3-HFPO-DA (S)			90.9	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	90.7	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	91.5	%	92	(70-130)		
MS2_202103250410	13C3-HFPO-DA (S)		100	92.4	%	92	(70-130)		
DUP_202103250412	13C4-PFOS- IS#2 (I)			100	%	100	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	98.5	%	99	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.9	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			99.3	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	97.8	%	98	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	98.2	%	98	(50-150)		
MS2_202103250410	13C4-PFOS- IS#2 (I)		100	99.2	%	99	(50-150)		
DUP_202103250412	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0505	ug/L	104	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0510	ug/L	105	(70-130)	30	0.99
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00214	ug/L	113	(50-150)		
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00212	ug/L	112	(50-150)		
MS2_202103250410	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.049	0.0482	ug/L	99	(70-130)		
DUP_202103250412	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0483	ug/L	104	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0493	ug/L	106	(70-130)	30	2.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00218	ug/L	117	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00216	ug/L	116	(50-150)		
MS2_202103250410	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.047	0.0476	ug/L	102	(70-130)		
DUP_202103250412	d3-NMeFOSAA (I)			104	%	104	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	99.6	%	100	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MBLK	d3-NMeFOSAA (I)			98.9	%	99	(50-150)		
MBLK	d3-NMeFOSAA (I)			103	%	103	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	105	%	105	(50-150)		
MS2_202103250410	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
DUP_202103250412	d5-NEtFOSAA (S)			92.4	%	92	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	95.0	%	95	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	88.4	%	88	(70-130)		
MBLK	d5-NEtFOSAA (S)			93.8	%	94	(70-130)		
MBLK	d5-NEtFOSAA (S)			92.7	%	93	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	93.9	%	94	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	89.8	%	90	(70-130)		
MS2_202103250410	d5-NEtFOSAA (S)		100	88.0	%	88	(70-130)		
DUP_202103250412	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0510	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0497	ug/L	99	(70-130)	30	2.6
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00219	ug/L	109	(50-150)		
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00216	ug/L	108	(50-150)		
MS2_202103250410	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.05	0.0486	ug/L	97	(70-130)		
DUP_202103250412	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0525	ug/L	105	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0516	ug/L	103	(70-130)	30	1.7
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00231	ug/L	116	(50-150)		
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		
MS2_202103250410	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0499	ug/L	100	(70-130)		
DUP_202103250412	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0525	ug/L	105	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0523	ug/L	105	(70-130)	30	0.38
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00229	ug/L	115	(50-150)		
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00227	ug/L	114	(50-150)		
MS2_202103250410	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.05	0.0492	ug/L	99	(70-130)		
DUP_202103250412	Perfluorobutanesulfonic acid (PFBS)	0.0028		0.00288	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0463	ug/L	105	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0471	ug/L	106	(70-130)	30	1.7
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00215	ug/L	121	(50-150)		
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00217	ug/L	123	(50-150)		
MS2_202103250410	Perfluorobutanesulfonic acid (PFBS)	0.0024	0.044	0.0470	ug/L	101	(70-130)		
DUP_202103250412	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0521	ug/L	104	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0528	ug/L	106	(70-130)	30	1.3
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00243	ug/L	121	(50-150)		
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00229	ug/L	114	(50-150)		
MS2_202103250410	Perfluorodecanoic acid (PFDA)	ND	0.05	0.0510	ug/L	102	(70-130)		
DUP_202103250412	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0502	ug/L	100	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0489	ug/L	98	(70-130)	30	2.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00208	ug/L	104	(50-150)		
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00194	ug/L	97	(50-150)		
MS2_202103250410	Perfluorododecanoic acid (PFDoA)	ND	0.05	0.0478	ug/L	96	(70-130)		
DUP_202103250412	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0530	ug/L	106	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0529	ug/L	106	(70-130)	30	0.19
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00228	ug/L	114	(50-150)		
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00244	ug/L	122	(50-150)		
MS2_202103250410	Perfluoroheptanoic acid (PFHpA)	ND	0.05	0.0528	ug/L	105	(70-130)		
DUP_202103250412	Perfluorohexanesulfonic acid (PFHxS)	0.0022		0.00215	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0498	ug/L	109	(70-130)		

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0506	ug/L	111	(70-130)	30	1.8
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00220	ug/L	120	(50-150)		
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00222	ug/L	122	(50-150)		
MS2_202103250410	Perfluorohexanesulfonic acid (PFHxS)	ND	0.046	0.0502	ug/L	108	(70-130)		
DUP_202103250412	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0541	ug/L	108	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0562	ug/L	112	(70-130)	30	3.8
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00240	ug/L	120	(50-150)		
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00240	ug/L	120	(50-150)		
MS2_202103250410	Perfluorohexanoic acid (PFHxA)	ND	0.05	0.0544	ug/L	107	(70-130)		
DUP_202103250412	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0559	ug/L	112	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0553	ug/L	111	(70-130)	30	1.1
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00251	ug/L	125	(50-150)		
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00245	ug/L	123	(50-150)		
MS2_202103250410	Perfluorononanoic acid (PFNA)	ND	0.05	0.0525	ug/L	105	(70-130)		
DUP_202103250412	Perfluorooctanesulfonic acid (PFOS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0492	ug/L	106	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0510	ug/L	110	(70-130)	30	3.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00227	ug/L	123	(50-150)		
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00227	ug/L	123	(50-150)		
MS2_202103250410	Perfluorooctanesulfonic acid (PFOS)	ND	0.046	0.0502	ug/L	105	(70-130)		
DUP_202103250412	Perfluorooctanoic acid (PFOA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0525	ug/L	105	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0530	ug/L	106	(70-130)	30	0.95
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00250	ug/L	125	(50-150)		
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00259	ug/L	130	(50-150)		
MS2_202103250410	Perfluorooctanoic acid (PFOA)	ND	0.05	0.0519	ug/L	102	(70-130)		

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RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202103250412	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0486	ug/L	97	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0480	ug/L	96	(70-130)	30	1.2
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00244	ug/L	122	(50-150)		
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00188	ug/L	94	(50-150)		
MS2_202103250410	Perfluorotetradecanoic acid (PFTA)	ND	0.05	0.0472	ug/L	94	(70-130)		
DUP_202103250412	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0471	ug/L	94	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0462	ug/L	92	(70-130)	30	1.9
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00199	ug/L	100	(50-150)		
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00192	ug/L	96	(50-150)		
MS2_202103250410	Perfluorotridecanoic acid (PFTrDA)	ND	0.05	0.0425	ug/L	85	(70-130)		
DUP_202103250412	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0489	ug/L	98	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0486	ug/L	97	(70-130)	30	0.41
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00217	ug/L	109	(50-150)		
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00214	ug/L	107	(50-150)		
MS2_202103250410	Perfluoroundecanoic acid (PFUnA)	ND	0.05	0.0470	ug/L	94	(70-130)		

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1317659

Analysis Date: 04/01/2021

DUP_202103250157	Total Dissolved Solid (TDS)	300		284	mg/L		(0-10)	10	4.1
DUP_202103250366	Total Dissolved Solid (TDS)	570		564	mg/L		(0-10)	10	0.35
LCS1	Total Dissolved Solid (TDS)		175	174	mg/L	99	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	706	mg/L	101	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	13.0	mg/L	130	(50-150)		

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1318035

Analysis Date: 04/02/2021

DUP_202102170021	Total Suspended Solids (TSS)	94		96.0	mg/L		(0-10)	10	2.1
DUP_202102170042	Total Suspended Solids (TSS)	150		252	mg/L		(0-10)	10	<u>17</u>
LCS1	Total Suspended Solids (TSS)		175	174	mg/L	99	(71-107)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 925810
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Total Suspended Solids (TSS)		175	168	mg/L	96	(71-107)	20	3.5
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	11.0	mg/L	110	(50-150)		

ICP Metals by EPA 200.7

Analytical Batch: 1318038

Analysis Date: 04/02/2021

LCS1	Calcium Total ICAP		50	51.1	mg/L	102	(85-115)		
LCS2	Calcium Total ICAP		50	51.1	mg/L	102	(85-115)	20	0.0
MBLK	Calcium Total ICAP			<0.5	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.11	mg/L	111	(50-150)		
MS_202103250146	Calcium Total ICAP	110	50	158	mg/L	90	(70-130)		
MS2_202103240323	Calcium Total ICAP	36	50	83.9	mg/L	97	(70-130)		
MSD_202103250146	Calcium Total ICAP	110	50	158	mg/L	88	(70-130)	20	0.21
MSD2_202103240323	Calcium Total ICAP	36	50	84.3	mg/L	97	(70-130)	20	0.45
LCS1	Iron Total ICAP		5	5.12	mg/L	102	(85-115)		
LCS2	Iron Total ICAP		5	5.12	mg/L	102	(85-115)	20	0.0
MBLK	Iron Total ICAP			<0.01	mg/L				
MRL_CHK	Iron Total ICAP		0.01	0.0114	mg/L	114	(50-150)		
MS_202103250146	Iron Total ICAP	0.014	5	5.09	mg/L	102	(70-130)		
MS2_202103240323	Iron Total ICAP	0.49	5	5.54	mg/L	101	(70-130)		
MSD_202103250146	Iron Total ICAP	0.014	5	5.11	mg/L	102	(70-130)	20	0.36
MSD2_202103240323	Iron Total ICAP	0.49	5	5.56	mg/L	101	(70-130)	20	0.25
LCS1	Magnesium Total ICAP		20	20.3	mg/L	101	(85-115)		
LCS2	Magnesium Total ICAP		20	20.3	mg/L	101	(85-115)	20	0.0
MBLK	Magnesium Total ICAP			<0.05	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.107	mg/L	107	(50-150)		
MS_202103250146	Magnesium Total ICAP	41	20	59.6	mg/L	94	(70-130)		
MS2_202103240323	Magnesium Total ICAP	13	20	32.7	mg/L	100	(70-130)		
MSD_202103250146	Magnesium Total ICAP	41	20	59.9	mg/L	96	(70-130)	20	0.49
MSD2_202103240323	Magnesium Total ICAP	13	20	32.8	mg/L	100	(70-130)	20	0.16
LCS1	Potassium Total ICAP		20	20.1	mg/L	101	(85-115)		
LCS2	Potassium Total ICAP		20	20.1	mg/L	101	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.5	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.701	mg/L	70	(50-150)		
MS_202103250146	Potassium Total ICAP	1.6	20	24.0	mg/L	112	(70-130)		
MS2_202103240323	Potassium Total ICAP	5.8	20	27.6	mg/L	109	(70-130)		
MSD_202103250146	Potassium Total ICAP	1.6	20	24.1	mg/L	112	(70-130)	20	0.43
MSD2_202103240323	Potassium Total ICAP	5.8	20	27.6	mg/L	109	(70-130)	20	0.14

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	Sodium Total ICAP		50	50.1	mg/L	100	(85-115)		
LCS2	Sodium Total ICAP		50	50.0	mg/L	100	(85-115)	20	0.20
MBLK	Sodium Total ICAP			<0.5	mg/L				
MRL_CHK	Sodium Total ICAP		1	1.15	mg/L	115	(50-150)		
MS_202103250146	Sodium Total ICAP	130	50	170	mg/L	82	(70-130)		
MS2_202103240323	Sodium Total ICAP	150	50	188	mg/L	82	(70-130)		
MSD_202103250146	Sodium Total ICAP	130	50	171	mg/L	83	(70-130)	20	0.31
MSD2_202103240323	Sodium Total ICAP	150	50	187	mg/L	81	(70-130)	20	0.30

Volatile Organics by GCMS by EPA 524.2
Analytical Batch: 1318059

Analysis Date: 04/01/2021

LCS1	1,1,1,2-Tetrachloroethane		5	5.42	ug/L	108	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.31	ug/L	106	(70-130)	20	2.0
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.660	ug/L	132	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.49	ug/L	90	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.41	ug/L	88	(70-130)	20	1.8
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.19	ug/L	104	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.10	ug/L	102	(70-130)	20	1.8
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1,2-Trichloroethane		5	5.30	ug/L	106	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.32	ug/L	106	(70-130)	20	0.38
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,1-Dichloroethane		5	4.84	ug/L	97	(70-130)		
LCS2	1,1-Dichloroethane		5	4.78	ug/L	96	(70-130)	20	1.3
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.21	ug/L	84	(70-130)		
LCS2	1,1-Dichloroethylene		5	4.34	ug/L	87	(70-130)	20	3.0
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.590	ug/L	118	(50-150)		
LCS1	1,1-Dichloropropene		5	4.47	ug/L	89	(70-130)		
LCS2	1,1-Dichloropropene		5	4.41	ug/L	88	(70-130)	20	1.4
MBLK	1,1-Dichloropropene			<0.5	ug/L				

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,1-Dichloropropene		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	5.15	ug/L	103	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	5.14	ug/L	103	(70-130)	20	0.19
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.620	ug/L	124	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.23	ug/L	105	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.20	ug/L	104	(70-130)	20	0.57
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	5.07	ug/L	101	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.19	ug/L	104	(70-130)	20	2.3
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.670	ug/L	134	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	5.07	ug/L	101	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.00	ug/L	100	(70-130)	20	1.4
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,2-Dichloroethane		5	5.25	ug/L	105	(70-130)		
LCS2	1,2-Dichloroethane		5	5.28	ug/L	106	(70-130)	20	0.57
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	99.0	%	99	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			100	%	100	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	105	%	105	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	100	%	100	(70-130)		
LCS1	1,2-Dichloropropane		5	5.21	ug/L	104	(70-130)		
LCS2	1,2-Dichloropropane		5	5.11	ug/L	102	(70-130)	20	1.9
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.94	ug/L	99	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.97	ug/L	99	(70-130)	20	0.61
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,3-Dichloropropane		5	5.40	ug/L	108	(70-130)		
LCS2	1,3-Dichloropropane		5	5.27	ug/L	105	(70-130)	20	2.4
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	2,2-Dichloropropane		5	4.47	ug/L	89	(70-130)		
LCS2	2,2-Dichloropropane		5	4.38	ug/L	88	(70-130)	20	2.0
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.450	ug/L	90	(50-150)		
LCS1	2-Butanone (MEK)		50	54.5	ug/L	109	(70-130)		
LCS2	2-Butanone (MEK)		50	52.4	ug/L	105	(70-130)	20	3.9
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.07	ug/L	101	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	97.4	%	97	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	99.6	%	100	(70-130)		
MBLK	4-Bromofluorobenzene (S)			99.6	%	100	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	99.8	%	100	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	98.0	%	98	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	53.7	ug/L	107	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	53.7	ug/L	107	(70-130)	20	0.0
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	5.12	ug/L	102	(50-150)		
LCS1	Benzene		5	5.07	ug/L	101	(70-130)		
LCS2	Benzene		5	4.97	ug/L	99	(70-130)	20	2.0
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromobenzene		5	5.09	ug/L	102	(70-130)		
LCS2	Bromobenzene		5	5.25	ug/L	105	(70-130)	20	3.1
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromochloromethane		5	5.19	ug/L	104	(70-130)		
LCS2	Bromochloromethane		5	5.24	ug/L	105	(70-130)	20	0.96
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromodichloromethane		5	5.38	ug/L	108	(70-130)		
LCS2	Bromodichloromethane		5	5.42	ug/L	108	(70-130)	20	0.74
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.660	ug/L	132	(50-150)		
LCS1	Bromoethane		5	4.86	ug/L	97	(70-130)		
LCS2	Bromoethane		5	4.79	ug/L	96	(70-130)	20	1.5
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Bromoform		5	5.80	ug/L	116	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Bromoform		5	5.61	ug/L	112	(70-130)	20	3.3
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.860	ug/L	<u>172</u>	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	4.66	ug/L	93	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	4.51	ug/L	90	(70-130)	20	3.3
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.570	ug/L	114	(50-150)		
LCS1	Carbon disulfide		5	4.34	ug/L	87	(70-130)		
LCS2	Carbon disulfide		5	4.26	ug/L	85	(70-130)	20	1.9
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.540	ug/L	108	(50-150)		
LCS1	Carbon Tetrachloride		5	4.18	ug/L	84	(70-130)		
LCS2	Carbon Tetrachloride		5	4.10	ug/L	82	(70-130)	20	1.9
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.770	ug/L	<u>154</u>	(50-150)		
LCS1	Chlorobenzene		5	5.18	ug/L	104	(70-130)		
LCS2	Chlorobenzene		5	5.09	ug/L	102	(70-130)	20	1.8
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	Chlorodibromomethane		5	6.12	ug/L	122	(70-130)		
LCS2	Chlorodibromomethane		5	6.13	ug/L	123	(70-130)	20	0.16
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.690	ug/L	138	(50-150)		
LCS1	Chloroethane		5	4.39	ug/L	88	(70-130)		
LCS2	Chloroethane		5	4.37	ug/L	87	(70-130)	20	0.46
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	5.16	ug/L	103	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	5.08	ug/L	102	(70-130)	20	1.6
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.73	ug/L	95	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.71	ug/L	94	(70-130)	20	0.42
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.420	ug/L	84	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.87	ug/L	97	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	5.09	ug/L	102	(70-130)	20	4.4
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.560	ug/L	112	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	5.88	ug/L	118	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	5.82	ug/L	116	(70-130)	20	1.0
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.670	ug/L	134	(50-150)		
LCS1	Dibromomethane		5	5.16	ug/L	103	(70-130)		
LCS2	Dibromomethane		5	5.10	ug/L	102	(70-130)	20	1.2
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	Dichlorodifluoromethane		5	3.72	ug/L	74	(70-130)		
LCS2	Dichlorodifluoromethane		5	3.61	ug/L	72	(70-130)	20	3.0
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	Dichloromethane		5	5.07	ug/L	101	(70-130)		
LCS2	Dichloromethane		5	4.96	ug/L	99	(70-130)	20	2.2
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Di-isopropyl ether		5	5.12	ug/L	102	(70-130)		
LCS2	Di-isopropyl ether		5	5.02	ug/L	100	(70-130)	20	2.0
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.490	ug/L	98	(50-150)		
LCS1	Ethyl benzene		5	5.15	ug/L	103	(70-130)		
LCS2	Ethyl benzene		5	4.98	ug/L	100	(70-130)	20	3.4
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.490	ug/L	98	(50-150)		
LCS1	Hexachlorobutadiene		5	4.60	ug/L	92	(70-130)		
LCS2	Hexachlorobutadiene		5	4.73	ug/L	95	(70-130)	20	2.8
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.570	ug/L	114	(50-150)		
LCS1	Isopropylbenzene		5	4.74	ug/L	95	(70-130)		
LCS2	Isopropylbenzene		5	4.72	ug/L	94	(70-130)	20	0.42
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	m,p-Xylenes		10	10.4	ug/L	104	(70-130)		
LCS2	m,p-Xylenes		10	10.2	ug/L	102	(70-130)	20	1.9
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	1.01	ug/L	101	(50-150)		
MRLW	m,p-Xylenes		0.5	0.500	ug/L	100	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.97	ug/L	99	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.03	ug/L	101	(70-130)	20	1.2
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.550	ug/L	110	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.12	ug/L	102	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.21	ug/L	104	(70-130)	20	1.7
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Naphthalene		5	5.17	ug/L	103	(70-130)		
LCS2	Naphthalene		5	5.21	ug/L	104	(70-130)	20	0.77
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.600	ug/L	120	(50-150)		
LCS1	n-Butylbenzene		5	4.84	ug/L	97	(70-130)		
LCS2	n-Butylbenzene		5	4.89	ug/L	98	(70-130)	20	1.0
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	n-Propylbenzene		5	4.64	ug/L	93	(70-130)		
LCS2	n-Propylbenzene		5	4.74	ug/L	95	(70-130)	20	2.1
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	o-Chlorotoluene		5	4.96	ug/L	99	(70-130)		
LCS2	o-Chlorotoluene		5	4.91	ug/L	98	(70-130)	20	1.0
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.580	ug/L	116	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	5.31	ug/L	106	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.12	ug/L	102	(70-130)	20	3.6
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.570	ug/L	114	(50-150)		
LCS1	o-Xylene		5	5.10	ug/L	102	(70-130)		
LCS2	o-Xylene		5	4.88	ug/L	98	(70-130)	20	4.4
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.540	ug/L	108	(50-150)		
LCS1	p-Chlorotoluene		5	5.14	ug/L	103	(70-130)		
LCS2	p-Chlorotoluene		5	5.13	ug/L	103	(70-130)	20	0.20
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.550	ug/L	110	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	5.03	ug/L	101	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.07	ug/L	101	(70-130)	20	0.79

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 925810
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.520	ug/L	104	(50-150)		
LCS1	p-Isopropyltoluene		5	4.86	ug/L	97	(70-130)		
LCS2	p-Isopropyltoluene		5	4.91	ug/L	98	(70-130)	20	1.0
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.490	ug/L	98	(50-150)		
LCS1	sec-Butylbenzene		5	4.78	ug/L	96	(70-130)		
LCS2	sec-Butylbenzene		5	4.88	ug/L	98	(70-130)	20	2.1
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Styrene		5	5.29	ug/L	106	(70-130)		
LCS2	Styrene		5	5.07	ug/L	101	(70-130)	20	4.3
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.500	ug/L	100	(50-150)		
LCS1	tert-amyl Methyl Ether		5	5.14	ug/L	103	(70-130)		
LCS2	tert-amyl Methyl Ether		5	5.15	ug/L	103	(70-130)	20	0.19
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.510	ug/L	102	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	5.19	ug/L	104	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	5.15	ug/L	103	(70-130)	20	0.77
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.540	ug/L	108	(50-150)		
LCS1	tert-Butylbenzene		5	4.78	ug/L	96	(70-130)		
LCS2	tert-Butylbenzene		5	4.80	ug/L	96	(70-130)	20	0.42
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.63	ug/L	93	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	4.55	ug/L	91	(70-130)	20	1.7
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.460	ug/L	92	(50-150)		
LCS1	Toluene		5	5.07	ug/L	101	(70-130)		
LCS2	Toluene		5	4.99	ug/L	100	(70-130)	20	1.6
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.510	ug/L	102	(50-150)		
LCS1	Toluene-d8 (S)		5	103	%	103	(70-130)		
LCS2	Toluene-d8 (S)		5	102	%	102	(70-130)		
MBLK	Toluene-d8 (S)			96.6	%	97	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	96.0	%	96	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRLW	Toluene-d8 (S)		5	97.0	%	97	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.84	ug/L	97	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	4.90	ug/L	98	(70-130)	20	1.2
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.550	ug/L	110	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	6.17	ug/L	123	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	6.02	ug/L	120	(70-130)	20	2.5
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.650	ug/L	130	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.91	ug/L	98	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.79	ug/L	96	(70-130)	20	2.5
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.490	ug/L	98	(50-150)		
LCS1	Trichlorofluoromethane		5	3.93	ug/L	79	(70-130)		
LCS2	Trichlorofluoromethane		5	3.97	ug/L	79	(70-130)	20	1.0
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.510	ug/L	102	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	3.71	ug/L	74	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	3.54	ug/L	71	(70-130)	20	4.7
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.10	ug/L	82	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.23	ug/L	85	(70-130)	20	3.1
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.570	ug/L	114	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.260	ug/L	104	(50-150)		

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1318079

Analysis Date: 04/01/2021

LCS1	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	2.00	ug/L	100	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0179	ug/L	90	(50-150)		
MS_202103250337	Hexavalent chromium(Dissolved)	0.46	2	2.47	ug/L	100	(90-110)		
MS_202103250382	Hexavalent chromium(Dissolved)	0.064	2	2.19	ug/L	106	(90-110)		
MSD_202103250337	Hexavalent chromium(Dissolved)	0.46	2	2.60	ug/L	107	(90-110)	20	5.1
MSD_202103250382	Hexavalent chromium(Dissolved)	0.064	2	2.22	ug/L	108	(90-110)	20	1.2

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 925810
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Hexavalent chromium(Dissolved) by EPA 218.6									
Analytical Batch: 1318504					Analysis Date: 04/05/2021				
LCS1	Hexavalent chromium(Dissolved)		2	1.99	ug/L	100	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.99	ug/L	100	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0176	ug/L	88	(50-150)		
MS_202103250320	Hexavalent chromium(Dissolved)	0.86	2	2.93	ug/L	104	(90-110)		
MS_202104020404	Hexavalent chromium(Dissolved)	0.063	2	2.16	ug/L	105	(90-110)		
MSD_202103250320	Hexavalent chromium(Dissolved)	0.86	2	2.96	ug/L	105	(90-110)	20	1
MSD_202104020404	Hexavalent chromium(Dissolved)	0.063	2	2.17	ug/L	106	(90-110)	20	0.21
Alkalinity in CaCO3 units by SM 2320B									
Analytical Batch: 1320231					Analysis Date: 04/12/2021				
LCS1	Alkalinity in CaCO3 units		100	102	mg/L	102	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	101	mg/L	101	(90-110)	20	0.99
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.81	mg/L	141	(50-150)		
MS_202103240627	Alkalinity in CaCO3 units	180	100	219	mg/L	<u>35</u>	(80-120)		
MS_202104010067	Alkalinity in CaCO3 units	110	100	165	mg/L	<u>50</u>	(80-120)		
MSD_202103240627	Alkalinity in CaCO3 units	180	100	216	mg/L	<u>32</u>	(80-120)	20	1.6
MSD_202104010067	Alkalinity in CaCO3 units	110	100	167	mg/L	<u>52</u>	(80-120)	20	1.4
Alkalinity in CaCO3 units by SM 2320B									
Analytical Batch: 1320930					Analysis Date: 04/14/2021				
LCS1	Alkalinity in CaCO3 units		100	102	mg/L	102	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	103	mg/L	103	(90-110)	20	0.98
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	3.00	mg/L	150	(50-150)		
MS_202103250375	Alkalinity in CaCO3 units	180	100	258	mg/L	<u>78</u>	(80-120)		
MS_202104060217	Alkalinity in CaCO3 units	130	100	228	mg/L	98	(80-120)		
MSD_202103250375	Alkalinity in CaCO3 units	180	100	256	mg/L	<u>76</u>	(80-120)	20	0.66
MSD_202104060217	Alkalinity in CaCO3 units	130	100	227	mg/L	97	(80-120)	20	0.68

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 04/15/2021

Quant Report - Page 1 of 1

, Tel Fax

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)* (Tot, E., Coli)

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required:
Comment:
Approved by:

Report of Analysis by 24-Hour Collert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Pos Tubes (Tot, E., Coli), MPN/100ml (Tot, E., Coli), Pres/Abs (P/A)* (Tot, E., Coli)

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required:
Comment:
Approved by:

Date of Issue: 04/15/2021

Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with 10 columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, Total Coliform Small, Total Coliform Large, E. Coli Small, E. Coli Large, MPN/100 mL, Presence/Absence (P/A)*

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 04/15/2021

Quant Report - Page 1 of 1

, Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-55066-1
Client Project/Site: 925810

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
4/8/2021 7:45:28 PM

Xuan Dang, Project Manager I
(714)895-5494
Xuan.Dang@eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 925810

Job ID: 570-55066-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 925810

Job ID: 570-55066-1

Job ID: 570-55066-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-55066-1

Comments

No additional comments.

Receipt

The samples were received on 3/26/2021 12:11 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.9° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 925810

Job ID: 570-55066-1

Client Sample ID: 202103250320

Lab Sample ID: 570-55066-1

No Detections.

Client Sample ID: 202103250337

Lab Sample ID: 570-55066-2

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 925810

Job ID: 570-55066-1

General Chemistry

Client Sample ID: 202103250320

Date Collected: 03/25/21 10:52

Date Received: 03/26/21 12:11

Lab Sample ID: 570-55066-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.956	0.765	mg/L		03/31/21 10:15	03/31/21 17:11	1

Client Sample ID: 202103250337

Date Collected: 03/25/21 12:28

Date Received: 03/26/21 12:11

Lab Sample ID: 570-55066-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		0.971	0.777	mg/L		03/31/21 10:15	03/31/21 17:11	1

QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 925810

Job ID: 570-55066-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-139887/1-A
Matrix: Water
Analysis Batch: 140053

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 139887

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.800	mg/L		03/31/21 10:12	03/31/21 17:11	1

Lab Sample ID: LCS 570-139887/2-A
Matrix: Water
Analysis Batch: 140053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 139887

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	34.70		mg/L		87	78 - 114

Lab Sample ID: LCSD 570-139887/3-A
Matrix: Water
Analysis Batch: 140053

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 139887

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	37.50		mg/L		94	78 - 114	8	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 925810

Job ID: 570-55066-1

General Chemistry

Prep Batch: 139887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-55066-1	202103250320	Total/NA	Water	1664A	
570-55066-2	202103250337	Total/NA	Water	1664A	
MB 570-139887/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-139887/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-139887/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 140053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-55066-1	202103250320	Total/NA	Water	1664A	139887
570-55066-2	202103250337	Total/NA	Water	1664A	139887
MB 570-139887/1-A	Method Blank	Total/NA	Water	1664A	139887
LCS 570-139887/2-A	Lab Control Sample	Total/NA	Water	1664A	139887
LCSD 570-139887/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	139887

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 925810

Job ID: 570-55066-1

Client Sample ID: 202103250320

Lab Sample ID: 570-55066-1

Date Collected: 03/25/21 10:52

Matrix: Water

Date Received: 03/26/21 12:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1046 mL	1000 mL	139887	03/31/21 10:15	USUL	ECL 1
Total/NA	Analysis	1664A		1			140053	03/31/21 17:11	F7UI	ECL 1

Instrument ID: NOEQUIP

Client Sample ID: 202103250337

Lab Sample ID: 570-55066-2

Date Collected: 03/25/21 12:28

Matrix: Water

Date Received: 03/26/21 12:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			1030 mL	1000 mL	139887	03/31/21 10:15	USUL	ECL 1
Total/NA	Analysis	1664A		1			140053	03/31/21 17:11	F7UI	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 925810

Job ID: 570-55066-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-21
California	State	2944	09-30-21
Guam	State	20-003R	10-31-20 *
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-30-22
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 925810

Job ID: 570-55066-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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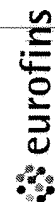
Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 925810

Job ID: 570-55066-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-55066-1	202103250320	Water	03/25/21 10:52	03/26/21 12:11	
570-55066-2	202103250337	Water	03/25/21 12:28	03/26/21 12:11	

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Eaton Analytical

Ship To:
Eurofins CalScience
7440 Lincoln Way
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax 714-894-7501

Folder #: 925810
Report Due: 04/08/2021

Submittal Form

Date: 3/26/2021

*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!

Report & Invoice must have the Folder # 925810 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature.

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: Eaton-MonroviaSubContract@eurofinset.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp. Date for requested tests + matrix. Samples from: CALIFORNIA

Sample ID: 202103250320
Client Sample ID for reference on: LH-INF-20210325
Sample Date & Time Matrix: 03/25/21 1052 DW
PWS Systemcode: PWSID
JLS

Sample type: [blank]
Sample Event: [blank]
Facility ID: [blank]
Sample Point ID: [blank]
Static ID: [blank]

Method: EPA 1664
Prep Method: Oil and Grease by 1664(subbed)
Analysis Requested: [blank]

Sample ID: 202103250337
Client Sample ID for reference on: MB-INF-20210325
Sample Date & Time Matrix: 03/25/21 1228 DW
PWS Systemcode: PWSID
JLS

Sample type: [blank]
Sample Event: [blank]
Facility ID: [blank]
Sample Point ID: [blank]
Static ID: [blank]

Method: EPA 1664
Prep Method: Oil and Grease by 1664(subbed)
Analysis Requested: [blank]



570-55066 Chain of Custody

Relinquished by: [Signature] Date: 3/26/21 Time: 12:11
Received by: [Signature] Date: 3/26/21 Time: 12:11
Relinquished by: [Signature] Date: [blank] Time: [blank]
Received by: [Signature] Date: [blank] Time: [blank]

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

20/19 SC6



Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-55066-1

Login Number: 55066

List Source: Eurofins Calscience

List Number: 1

Creator: Le, Danny

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 931039
Project: 0250000
Group: WRD Pilot [Set #2]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli CFR 141.21(f)(6)(i)		x		x
E. Coli SM 9223			x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ⁻² D		x	
Sulfite	SM 4500-SO ³ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 931039
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **April 22, 2021 at 1520**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202104220331</u>	GAC-1-20210422	04/22/2021 0923
	Static ID: 537.1	
	@537.1	
<u>202104220332</u>	GAC-2-20210422	04/22/2021 0926
	@537.1	
<u>202104220333</u>	GAC-3-20210422	04/22/2021 0929
	@537.1	
<u>202104220334</u>	GAC-4-20210422	04/22/2021 0932
	@537.1	
<u>202104220335</u>	IX-1-20210422	04/22/2021 0935
	@537.1	
<u>202104220337</u>	IX-2-20210422	04/22/2021 0938
	@537.1	
<u>202104220338</u>	IX-3-20210422	04/22/2021 0941
	@537.1	
<u>202104220339</u>	IX-4-20210422	04/22/2021 0944
	@537.1	
<u>202104220340</u>	LH-INF-20210422	04/22/2021 0947
	@537.1	
	Dissolved Organic Carbon	Total Organic Carbon
<u>202104220341</u>	GAC-5-20210422	04/22/2021 1223
	@537.1	
<u>202104220342</u>	GAC-6-20210422	04/22/2021 1226
	@537.1	
<u>202104220343</u>	GAC-7-20210422	04/22/2021 1229
	@537.1	
<u>202104220344</u>	GAC-8-20210422	04/22/2021 1232
	@537.1	

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 931039
 Project: 0250000
 Sample Group: WRD Pilot [Set #2]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **April 22, 2021 at 1520**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202104220345</u>	IX-5-20210422	04/22/2021 1235
	@537.1	
<u>202104220346</u>	IX-6-20210422	04/22/2021 1238
	@537.1	
<u>202104220347</u>	IX-7-20210422	04/22/2021 1241
	@537.1	
<u>202104220348</u>	IX-8-20210422	04/22/2021 1244
	@537.1	
<u>202104220351</u>	MB-INF-20210422	04/22/2021 1247
	@537.1	
	Dissolved Organic Carbon	Total Organic Carbon

Test Description

@537.1 -- EPA Method 537.1

931039

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302										
TEL: (949) 679-1070		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang										
E-MAIL: mjeon@gsi-net.com		GLOBAL ID:		SAMPLER(S): (PRINT) RDT										
LABORATORY: Eurofins Eaton Analytical		REQUESTED ANALYSES Please check box or fill in blank as needed.												
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD														
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rditorres@gsi-net.com; Provide EDD of sample results														
LAB USE ONLY	SAMPLE ID	SAMPLING TIME		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C)	DOC	
		DATE	TIME											
	GAC-1 - 20210422	4-22	0923	Water	2		2		X					
	GAC-2 - 20210422		0926	Water	1				X					
	GAC-3 - 20210422		0929	Water	1				X					
	GAC-4 - 20210422		0932	Water	1				X					
	IX-1 - 20210422		0935	Water	1				X					
	IX-2 - 20210422		0938	Water	1				X					
	IX-3 - 20210422		0941	Water	1				X					
	IX-4 - 20210422		0944	Water	1				X					
	LH-INF - 20210422		0947	Water	4	1	3		X					
	LH-INF - 20210422			Water										
	GAC-5 - 20210422	4-22	1223	Water	2		2		X					
	GAC-6 - 20210422		1226	Water	1				X					
	GAC-7 - 20210422		1229	Water	1				X					
	GAC-8 - 20210422		1232	Water	1				X					
Relinquished by: (Signature) <u>Robert Torres</u>		Received by: (Signature)		Date: <u>4-22-2021</u>		Time: <u>1520</u>								
Relinquished by: (Signature)		Received by: (Signature) <u>Chris Bruck</u>		Date: <u>4-22-21</u>		Time: <u>1520</u>								
Relinquished by: (Signature)		Received by: (Signature)		Date:		Time:								

FROM: GSI Environmental Inc. 19200 Von Karman Ave, Suite 800 Irvine, CA 92612 (949) 679-1070		PROJECT NAME: WRD Pilot		PROJECT NO.: 5302															
E-MAIL: mjeon@gsi-net.com		PROJECT CONTACT: Miae Jeon		LAB CONTACT: Sophia Liang															
LABORATORY: Eurofins Eaton Analytical		GLOBAL ID:		SAMPLER(S): (PRINT) RDT															
REQUESTED ANALYSES Please check box or fill in blank as needed.																			
LAB USE ONLY	SAMPLE ID	TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD		NO. OF CONT.	Field Filtered														
		DATE	SAMPLING TIME			MATRIX													
SPECIAL INSTRUCTIONS: Send report copies to pegalvin@gsi-net.com, mjeon@gsi-net.com, & rdtorres@gsi-net.com. Provide EDD of sample results																			
	IX-5 - 20210422	4-22	1235	Water	2	Unpreserved	Preserved	Field Filtered	PFAS - full list (EPA 537.1)	Sulfate, Nitrate (as N), Nitrate (as NO3), Chloride (EPA 300.0)	Alkalinity (as CaCO3), (SM 2320B)	TOC (SM 5310C) <i>DC</i>							
	IX-6 - 20210422		1238	Water	↓				X										
	IX-7 - 20210422		1241	Water	↓				X										
	IX-8 - 20210422		1244	Water	↓				X										
	MB-INF - 20210422		1247	Water	↓				X										
	MB-INF-DUP			Water															
	MB			Water															
Relinquished by: (Signature) <i>Robert Torres</i>					Received by: (Signature)	Date: 4-22-2021					Time: 1520								
Relinquished by: (Signature)					Received by: (Signature) <i>Chris Brueck</i>	Date: 4-22-21					Time: 1520								
Relinquished by: (Signature)					Received by: (Signature)	Date:					Time:								



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EFA Folder Number: 931099

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 610 (Observation = 8.1 °C) (Corr. Factor = 0.12 °C) (Final = 7.9 °C)

TYPE OF ICE: Real Synthetic No Ice CONDITION OF ICE: Frozen Partially Frozen Thawed N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results _____

7) VOA and Radon Headspace: _____

_____ Samples with Headspace (see below): _____

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 566, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	Samp ID	Bottle #	None/<6 mm

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: Chuck Brooker SIGNATURE PRINT NAME

COMPANY/TITLE: Eurofins Eaton Analytical DATE: 4.22.21 TIME: 1520

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 931039
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202104220331				
		<u>GAC-1-20210422</u>				
04/27/2021 19:26	Perfluorobutanesulfonic acid (PFBS)		0.0020		ug/L	0.0020
		202104220332				
		<u>GAC-2-20210422</u>				
04/27/2021 19:36	Perfluorobutanesulfonic acid (PFBS)		0.0028		ug/L	0.0020
		202104220333				
		<u>GAC-3-20210422</u>				
04/28/2021 09:50	Perfluorobutanesulfonic acid (PFBS)		0.0052		ug/L	0.0020
04/28/2021 09:50	Perfluorohexanoic acid (PFHxA)		0.0029		ug/L	0.0020
		202104220335				
		<u>IX-1-20210422</u>				
04/28/2021 10:09	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
04/28/2021 10:09	Perfluorooctanoic acid (PFOA)		0.0047		ug/L	0.0020
		202104220337				
		<u>IX-2-20210422</u>				
04/28/2021 10:19	Perfluoroheptanoic acid (PFHpA)		0.0020		ug/L	0.0020
04/28/2021 10:19	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
04/28/2021 10:19	Perfluorooctanoic acid (PFOA)		0.0046		ug/L	0.0020
		202104220338				
		<u>IX-3-20210422</u>				
04/28/2021 10:28	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
04/28/2021 10:28	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
04/28/2021 10:28	Perfluorooctanoic acid (PFOA)		0.0090		ug/L	0.0020
		202104220339				
		<u>IX-4-20210422</u>				
04/28/2021 10:38	Perfluoroheptanoic acid (PFHpA)		0.0022		ug/L	0.0020
04/28/2021 10:38	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
04/28/2021 10:38	Perfluorooctanoic acid (PFOA)		0.0046		ug/L	0.0020
		202104220340				
		<u>LH-INF-20210422</u>				
05/03/2021 02:53	Dissolved Organic Carbon		0.73		mg/L	0.20
04/28/2021 10:48	Perfluorobutanesulfonic acid (PFBS)		0.0069		ug/L	0.0020
04/28/2021 10:48	Perfluorohexanesulfonic acid (PFHxS)		0.0062		ug/L	0.0020
04/28/2021 10:48	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
04/28/2021 10:48	Perfluorononanoic acid (PFNA)		0.0031		ug/L	0.0020
04/28/2021 10:48	Perfluorooctanesulfonic acid (PFOS)		0.031		ug/L	0.0020
04/28/2021 10:48	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
05/06/2021 00:47	Total Organic Carbon		0.64		mg/L	0.20
		202104220341				
		<u>GAC-5-20210422</u>				
04/28/2021 10:57	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
04/28/2021 10:57	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
04/28/2021 10:57	Perfluorohexanesulfonic acid (PFHxS)		0.0047		ug/L	0.0020
04/28/2021 10:57	Perfluorohexanoic acid (PFHxA)		0.0069		ug/L	0.0020
04/28/2021 10:57	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
04/28/2021 10:57	Perfluorooctanesulfonic acid (PFOS)		0.016		ug/L	0.0020
04/28/2021 10:57	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
		202104220342	<u>GAC-6-20210422</u>			
04/28/2021 11:07	Perfluorobutanesulfonic acid (PFBS)		0.012		ug/L	0.0020
04/28/2021 11:07	Perfluoroheptanoic acid (PFHpA)		0.0055		ug/L	0.0020
04/28/2021 11:07	Perfluorohexanesulfonic acid (PFHxS)		0.0075		ug/L	0.0020
04/28/2021 11:07	Perfluorohexanoic acid (PFHxA)		0.0078		ug/L	0.0020
04/28/2021 11:07	Perfluorooctanesulfonic acid (PFOS)		0.0052		ug/L	0.0020
04/28/2021 11:07	Perfluorooctanoic acid (PFOA)		0.019		ug/L	0.0020
		202104220343	<u>GAC-7-20210422</u>			
04/28/2021 21:04	Perfluorobutanesulfonic acid (PFBS)		0.011		ug/L	0.0020
04/28/2021 21:04	Perfluoroheptanoic acid (PFHpA)		0.0042		ug/L	0.0020
04/28/2021 21:04	Perfluorohexanesulfonic acid (PFHxS)		0.0064		ug/L	0.0020
04/28/2021 21:04	Perfluorohexanoic acid (PFHxA)		0.0069		ug/L	0.0020
04/28/2021 21:04	Perfluorononanoic acid (PFNA)		0.0028		ug/L	0.0020
04/28/2021 21:04	Perfluorooctanesulfonic acid (PFOS)		0.021		ug/L	0.0020
04/28/2021 21:04	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
		202104220344	<u>GAC-8-20210422</u>			
04/28/2021 21:13	Perfluorobutanesulfonic acid (PFBS)		0.0096		ug/L	0.0020
04/28/2021 21:13	Perfluoroheptanoic acid (PFHpA)		0.0033		ug/L	0.0020
04/28/2021 21:13	Perfluorohexanesulfonic acid (PFHxS)		0.0034		ug/L	0.0020
04/28/2021 21:13	Perfluorohexanoic acid (PFHxA)		0.0068		ug/L	0.0020
04/28/2021 21:13	Perfluorooctanesulfonic acid (PFOS)		0.0088		ug/L	0.0020
04/28/2021 21:13	Perfluorooctanoic acid (PFOA)		0.0089		ug/L	0.0020
		202104220345	<u>IX-5-20210422</u>			
04/28/2021 21:23	Perfluoroheptanoic acid (PFHpA)		0.0023		ug/L	0.0020
04/28/2021 21:23	Perfluorohexanoic acid (PFHxA)		0.0060		ug/L	0.0020
04/28/2021 21:23	Perfluorooctanoic acid (PFOA)		0.0038		ug/L	0.0020
		202104220346	<u>IX-6-20210422</u>			
04/28/2021 21:33	Perfluoroheptanoic acid (PFHpA)		0.0040		ug/L	0.0020
04/28/2021 21:33	Perfluorohexanoic acid (PFHxA)		0.0069		ug/L	0.0020
04/28/2021 21:33	Perfluorooctanoic acid (PFOA)		0.0052		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
		202104220347	<u>IX-7-20210422</u>			
04/28/2021 21:42	Perfluoroheptanoic acid (PFHpA)		0.0048		ug/L	0.0020
04/28/2021 21:42	Perfluorohexanoic acid (PFHxA)		0.0065		ug/L	0.0020
04/28/2021 21:42	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
		202104220348	<u>IX-8-20210422</u>			
04/28/2021 21:52	Perfluoroheptanoic acid (PFHpA)		0.0046		ug/L	0.0020
04/28/2021 21:52	Perfluorohexanoic acid (PFHxA)		0.0067		ug/L	0.0020
04/28/2021 21:52	Perfluorooctanoic acid (PFOA)		0.0070		ug/L	0.0020
		202104220351	<u>MB-INF-20210422</u>			
05/02/2021 15:09	Dissolved Organic Carbon		0.70		mg/L	0.20
04/28/2021 22:12	Perfluorobutanesulfonic acid (PFBS)		0.0097		ug/L	0.0020
04/28/2021 22:12	Perfluoroheptanoic acid (PFHpA)		0.0039		ug/L	0.0020
04/28/2021 22:12	Perfluorohexanesulfonic acid (PFHxS)		0.0066		ug/L	0.0020
04/28/2021 22:12	Perfluorohexanoic acid (PFHxA)		0.0061		ug/L	0.0020
04/28/2021 22:12	Perfluorononanoic acid (PFNA)		0.0036		ug/L	0.0020
04/28/2021 22:12	Perfluorooctanesulfonic acid (PFOS)		0.042		ug/L	0.0020
04/28/2021 22:12	Perfluorooctanoic acid (PFOA)		0.015		ug/L	0.0020
05/04/2021 06:50	Total Organic Carbon		0.80		mg/L	0.20

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Water Replenishment District
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 Lakewood, CA 90712

Samples Received on:
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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20210422 (202104220331)					Sampled on 04/22/2021 0923				
Static ID: 537.1									
EPA 537.1 - EPA Method 537.1									
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0020	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	0.0020	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	13C2-PFDA	81	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	13C2-PFHxA	90	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	13C2-PFOA- IS#1	124	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	13C3-HFPO-DA	85	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	13C4-PFOS- IS#2	106	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	d3-NMeFOSAA	93	%	1
04/26/21	04/27/21	19:26	1323263	1323895	(EPA 537.1)	d5-NEtFOSAA	96	%	1

GAC-2-20210422 (202104220332)					Sampled on 04/22/2021 0926				
EPA 537.1 - EPA Method 537.1									
04/26/21	04/27/21	19:36	1323263	1323895	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0020	1
04/26/21	04/27/21	19:36	1323263	1323895	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0020	1

Rounding on totals after summation.
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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0028	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	13C2-PFDA	83	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	13C2-PFHxA	96	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	13C2-PFOA- IS#1	117	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	13C3-HFPO-DA	91	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	d3-NMeFOSAA	96	%		1
04/26/21	04/27/21 19:36	1323263	1323895	(EPA 537.1)	d5-NEtFOSAA	93	%		1

GAC-3-20210422 (202104220333)

Sampled on 04/22/2021 0929

EPA 537.1 - EPA Method 537.1

04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0052	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0029	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	13C2-PFDA	92	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	13C2-PFHxA	101	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	96	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	94	%		1
04/26/21	04/28/21 09:50	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	101	%		1

GAC-4-20210422 (202104220334)

Sampled on 04/22/2021 0932

EPA 537.1 - EPA Method 537.1

04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

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Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	13C2-PFDA	89	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	13C2-PFHxA	97	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	111	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	92	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	92	%		1
04/26/21	04/28/21 10:00	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	95	%		1

IX-1-20210422 (202104220335)

Sampled on 04/22/2021 0935

EPA 537.1 - EPA Method 537.1

04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0047	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	13C2-PFDA	95	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	13C2-PFHxA	102	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	102	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	95	%		1
04/26/21	04/28/21 10:09	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	96	%		1

IX-2-20210422 (202104220337)

Sampled on 04/22/2021 0938

EPA 537.1 - EPA Method 537.1

04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0020	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0046	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	13C2-PFDA	99	%		1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	13C2-PFHxA	106	%		1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	104	%		1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	89	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:19	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	98	%		1
IX-3-20210422 (202104220338)					Sampled on 04/22/2021 0941				
EPA 537.1 - EPA Method 537.1									
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0090	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	13C2-PFDA	95	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	13C2-PFHxA	103	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	104	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	92	%		1
04/26/21	04/28/21 10:28	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	93	%		1

IX-4-20210422 (202104220339)

Sampled on 04/22/2021 0944

EPA 537.1 - EPA Method 537.1

04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0022	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0046	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	13C2-PFDA	90	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	13C2-PFHxA	100	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	107	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	99	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	92	%		1
04/26/21	04/28/21 10:38	1323411	1324052	(EPA 537.1)	d5-NMeFOSAA	97	%		1

LH-INF-20210422 (202104220340)

Sampled on 04/22/2021 0947

SM 5310C - Total Organic Carbon

05/06/21 00:47	1325830	(SM 5310C)	Total Organic Carbon	0.64	mg/L	0.20	1
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SM 5310C - Dissolved Organic Carbon

04/22/21 05/03/21 02:53	1322809	1324825	(SM 5310C)	Dissolved Organic Carbon	0.73	mg/L	0.20	1
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EPA 537.1 - EPA Method 537.1

04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0069	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0062	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0031	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.031	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	13C2-PFDA	97	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	13C2-PFHxA	104	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	101	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	101	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	91	%		1
04/26/21	04/28/21 10:48	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	96	%		1

GAC-5-20210422 (202104220341)

Sampled on 04/22/2021 1223

EPA 537.1 - EPA Method 537.1

04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0047	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0069	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.016	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	13C2-PFDA	89	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	13C2-PFHxA	101	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	99	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	94	%		1
04/26/21	04/28/21 10:57	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	92	%		1

GAC-6-20210422 (202104220342)

Sampled on 04/22/2021 1226

EPA 537.1 - EPA Method 537.1

04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.012	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0055	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0075	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0078	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0052	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.019	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	13C2-PFDA	98	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	13C2-PFHxA	106	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	13C2-PFOA- IS#1	99	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	13C3-HFPO-DA	104	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	13C4-PFOS- IS#2	105	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	d3-NMeFOSAA	94	%		1
04/26/21	04/28/21 11:07	1323411	1324052	(EPA 537.1)	d5-NEtFOSAA	94	%		1

GAC-7-20210422 (202104220343)

Sampled on 04/22/2021 1229

EPA 537.1 - EPA Method 537.1

04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.011	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0042	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0064	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0069	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0028	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.021	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	13C2-PFDA	105	%		1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	13C2-PFHxA	110	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	103	%		1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	101	%		1
04/27/21	04/28/21 21:04	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	108	%		1

GAC-8-20210422 (202104220344)

Sampled on 04/22/2021 1232

EPA 537.1 - EPA Method 537.1

04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0096	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0033	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0034	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0068	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0088	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0089	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	13C2-PFDA	102	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	13C2-PFHxA	109	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	105	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	101	%		1
04/27/21	04/28/21 21:13	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	102	%		1

IX-5-20210422 (202104220345)

Sampled on 04/22/2021 1235

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 537.1 - EPA Method 537.1									
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	11-chloro-eicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0060	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0038	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	13C2-PFDA	102	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	13C2-PFHxA	103	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	102	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	105	%		1
04/27/21	04/28/21 21:23	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	100	%		1

IX-6-20210422 (202104220346)

Sampled on 04/22/2021 1238

EPA 537.1 - EPA Method 537.1									
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	11-chloro-eicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
 Fax: (866) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0040	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0069	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0052	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	13C2-PFDA	108	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	13C2-PFHxA	111	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	107	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	101	%		1
04/27/21	04/28/21 21:33	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	108	%		1

IX-7-20210422 (202104220347)

Sampled on 04/22/2021 1241

EPA 537.1 - EPA Method 537.1

04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0048	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0065	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	13C2-PFDA	116	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	13C2-PFHxA	119	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	114	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	100	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	103	%		1
04/27/21	04/28/21 21:42	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	108	%		1

IX-8-20210422 (202104220348)

Sampled on 04/22/2021 1244

EPA 537.1 - EPA Method 537.1

04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0046	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0067	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0070	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	13C2-PFDA	111	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	13C2-PFHxA	119	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	108	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	117	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	103	%		1
04/27/21	04/28/21 21:52	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	118	%		1

MB-INF-20210422 (202104220351)

Sampled on 04/22/2021 1247

SM 5310C - Total Organic Carbon

05/04/21 06:50	1325001	(SM 5310C)	Total Organic Carbon	0.80	mg/L	0.20	1
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SM 5310C - Dissolved Organic Carbon

04/22/21 05/02/21 15:09	1322809	1324825	(SM 5310C)	Dissolved Organic Carbon	0.70	mg/L	0.20	1
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EPA 537.1 - EPA Method 537.1

04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0097	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0039	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0066	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0061	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0036	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.042	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.015	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 931039
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 04/22/2021 1520

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	13C2-PFDA	109	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	13C2-PFHxA	114	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	13C2-PFOA- IS#1	109	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	13C3-HFPO-DA	112	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	13C4-PFOS- IS#2	101	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	d3-NMeFOSAA	97	%		1
04/27/21	04/28/21 22:12	1323664	1324216	(EPA 537.1)	d5-NEtFOSAA	115	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 931039
Project: 0250000
Group: WRD Pilot [Set #2]

Water Replenishment District

EPA Method 537.1

Prep Batch: 1323263 Analytical Batch: 1323895

202104220331 GAC-1-20210422
 202104220332 GAC-2-20210422

Analysis Date: 04/27/2021

Analyzed by: KAM
 Analyzed by: KAM

EPA Method 537.1

Prep Batch: 1323411 Analytical Batch: 1324052

202104220333 GAC-3-20210422
 202104220334 GAC-4-20210422
 202104220335 IX-1-20210422
 202104220337 IX-2-20210422
 202104220338 IX-3-20210422
 202104220339 IX-4-20210422
 202104220340 LH-INF-20210422
 202104220341 GAC-5-20210422
 202104220342 GAC-6-20210422

Analysis Date: 04/28/2021

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

EPA Method 537.1

Prep Batch: 1323664 Analytical Batch: 1324216

202104220343 GAC-7-20210422
 202104220344 GAC-8-20210422
 202104220345 IX-5-20210422
 202104220346 IX-6-20210422
 202104220347 IX-7-20210422
 202104220348 IX-8-20210422
 202104220351 MB-INF-20210422

Analysis Date: 04/28/2021

Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM
 Analyzed by: KAM

Dissolved Organic Carbon

Prep Batch: 1322809 Analytical Batch: 1324825

202104220340 LH-INF-20210422
 202104220351 MB-INF-20210422

Analysis Date: 05/03/2021

Analyzed by: WBH
 Analyzed by: WBH

Total Organic Carbon

Analytical Batch: 1325001

202104220351 MB-INF-20210422

Analysis Date: 05/04/2021

Analyzed by: WBH

Total Organic Carbon

Analytical Batch: 1325830

202104220340 LH-INF-20210422

Analysis Date: 05/06/2021

Analyzed by: WBH

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1323263 Analytical Batch: 1323895					Analysis Date: 04/27/2021				
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0244	ug/L	104	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0242	ug/L	103	(70-130)	30	0.82
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00197	ug/L	105	(50-150)		
MS1_202104200381	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0250	ug/L	106	(70-130)		
MSD1_202104200381	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0257	ug/L	109	(70-130)	30	2.8
LCS1	13C2-PFDA (S)		100	90.1	%	90	(70-130)		
LCS2	13C2-PFDA (S)		100	91.0	%	91	(70-130)		
MBLK	13C2-PFDA (S)			90.1	%	90	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	91.8	%	92	(70-130)		
MS1_202104200381	13C2-PFDA (S)		100	83.0	%	83	(70-130)		
MSD1_202104200381	13C2-PFDA (S)		100	89.8	%	90	(70-130)		
LCS1	13C2-PFHxA (S)		100	99.6	%	100	(70-130)		
LCS2	13C2-PFHxA (S)		100	99.3	%	99	(70-130)		
MBLK	13C2-PFHxA (S)			100	%	100	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	97.5	%	97	(70-130)		
MS1_202104200381	13C2-PFHxA (S)		100	95.1	%	95	(70-130)		
MSD1_202104200381	13C2-PFHxA (S)		100	99.1	%	99	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	109	%	109	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	107	%	107	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			111	%	111	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	115	%	115	(50-150)		
MS1_202104200381	13C2-PFOA- IS#1 (I)		100	114	%	114	(50-150)		
MSD1_202104200381	13C2-PFOA- IS#1 (I)		100	108	%	108	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	93.9	%	94	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	95.9	%	96	(70-130)		
MBLK	13C3-HFPO-DA (S)			95.8	%	96	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	93.3	%	93	(70-130)		
MS1_202104200381	13C3-HFPO-DA (S)		100	93.2	%	93	(70-130)		
MSD1_202104200381	13C3-HFPO-DA (S)		100	95.6	%	96	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	105	%	105	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			103	%	103	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	110	%	110	(50-150)		
MS1_202104200381	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202104200381	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0242	ug/L	102	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0247	ug/L	104	(70-130)	30	2.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00207	ug/L	109	(50-150)		
MS1_202104200381	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0241	ug/L	102	(70-130)		
MSD1_202104200381	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0258	ug/L	109	(70-130)	30	6.7
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0244	ug/L	105	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0243	ug/L	104	(70-130)	30	0.82
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00200	ug/L	107	(50-150)		
MS1_202104200381	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0249	ug/L	107	(70-130)		
MSD1_202104200381	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0266	ug/L	114	(70-130)	30	7.0
LCS1	d3-NMeFOSAA (I)		100	93.0	%	93	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	92.0	%	92	(50-150)		
MBLK	d3-NMeFOSAA (I)			86.9	%	87	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	94.3	%	94	(50-150)		
MS1_202104200381	d3-NMeFOSAA (I)		100	93.2	%	93	(50-150)		
MSD1_202104200381	d3-NMeFOSAA (I)		100	91.4	%	91	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	95.4	%	95	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	97.2	%	97	(70-130)		
MBLK	d5-NEtFOSAA (S)			102	%	102	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	100	%	100	(70-130)		
MS1_202104200381	d5-NEtFOSAA (S)		100	92.2	%	92	(70-130)		
MSD1_202104200381	d5-NEtFOSAA (S)		100	93.7	%	94	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0258	ug/L	103	(70-130)	30	3.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00207	ug/L	103	(50-150)		
MS1_202104200381	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0249	ug/L	100	(70-130)		
MSD1_202104200381	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0263	ug/L	105	(70-130)	30	5.5
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0263	ug/L	105	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0275	ug/L	110	(70-130)	30	4.5
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00225	ug/L	113	(50-150)		
MS1_202104200381	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0272	ug/L	108	(70-130)		
MSD1_202104200381	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0276	ug/L	110	(70-130)	30	1.7
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0262	ug/L	105	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0267	ug/L	107	(70-130)	30	1.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS1_202104200381	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0258	ug/L	102	(70-130)		
MSD1_202104200381	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0274	ug/L	109	(70-130)	30	6.0
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0237	ug/L	107	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0241	ug/L	109	(70-130)	30	1.7
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00205	ug/L	116	(50-150)		
MS1_202104200381	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0248	ug/L	111	(70-130)		
MSD1_202104200381	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0262	ug/L	117	(70-130)	30	5.4
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0264	ug/L	106	(70-130)	30	1.1
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00218	ug/L	109	(50-150)		
MS1_202104200381	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0250	ug/L	100	(70-130)		
MSD1_202104200381	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0264	ug/L	106	(70-130)	30	5.6
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0236	ug/L	95	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0237	ug/L	95	(70-130)	30	0.42
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00193	ug/L	97	(50-150)		
MS1_202104200381	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0226	ug/L	90	(70-130)		
MSD1_202104200381	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0243	ug/L	97	(70-130)	30	7.0
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0264	ug/L	105	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0271	ug/L	108	(70-130)	30	2.6
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00229	ug/L	115	(50-150)		
MS1_202104200381	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0266	ug/L	104	(70-130)		
MSD1_202104200381	Perfluoroheptanoic acid (PFHpA)	ND	0.025	0.0285	ug/L	112	(70-130)	30	7.0
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0258	ug/L	113	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)	30	2.3
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS1_202104200381	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0270	ug/L	115	(70-130)		
MSD1_202104200381	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0281	ug/L	120	(70-130)	30	3.8
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0260	ug/L	104	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0270	ug/L	108	(70-130)	30	3.4
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00225	ug/L	112	(50-150)		
MS1_202104200381	Perfluorohexanoic acid (PFHxA)	0.0030	0.025	0.0283	ug/L	101	(70-130)		
MSD1_202104200381	Perfluorohexanoic acid (PFHxA)	0.0030	0.025	0.0305	ug/L	110	(70-130)	30	7.6
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0278	ug/L	111	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0278	ug/L	111	(70-130)	30	0.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202104200381	Perfluorononanoic acid (PFNA)	ND	0.025	0.0274	ug/L	109	(70-130)		
MSD1_202104200381	Perfluorononanoic acid (PFNA)	ND	0.025	0.0283	ug/L	112	(70-130)	30	3.2
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0249	ug/L	108	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0254	ug/L	110	(70-130)	30	2.0
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00211	ug/L	114	(50-150)		
MS1_202104200381	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0258	ug/L	111	(70-130)		
MSD1_202104200381	Perfluorooctanesulfonic acid (PFOS)	ND	0.023	0.0266	ug/L	114	(70-130)	30	3.4
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0267	ug/L	107	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0276	ug/L	110	(70-130)	30	3.3
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00243	ug/L	122	(50-150)		
MS1_202104200381	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0289	ug/L	112	(70-130)		
MSD1_202104200381	Perfluorooctanoic acid (PFOA)	ND	0.025	0.0292	ug/L	114	(70-130)	30	1.2
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0244	ug/L	98	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0250	ug/L	100	(70-130)	30	2.4
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202104200381	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0239	ug/L	95	(70-130)		
MSD1_202104200381	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0246	ug/L	98	(70-130)	30	2.7
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0242	ug/L	97	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0248	ug/L	99	(70-130)	30	2.9
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00205	ug/L	103	(50-150)		
MS1_202104200381	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0230	ug/L	92	(70-130)		
MSD1_202104200381	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0247	ug/L	99	(70-130)	30	7.0
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0247	ug/L	99	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0245	ug/L	98	(70-130)	30	0.81
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00200	ug/L	100	(50-150)		
MS1_202104200381	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0230	ug/L	92	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD1_202104200381	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0249	ug/L	100	(70-130)	30	7.8

EPA Method 537.1 by EPA 537.1

Prep Batch: 1323411 Analytical Batch: 1324052

Analysis Date: 04/28/2021

LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0244	ug/L	104	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0252	ug/L	107	(70-130)	30	3.2
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00203	ug/L	108	(50-150)		
MS_202104200382	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00203	ug/L	108	(50-150)		
MSD_202104200382	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00206	ug/L	110	(50-150)	50	1.6
LCS1	13C2-PFDA (S)		100	98.1	%	98	(70-130)		
LCS2	13C2-PFDA (S)		100	101	%	101	(70-130)		
MBLK	13C2-PFDA (S)			96.4	%	96	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	98.8	%	99	(70-130)		
MS_202104200382	13C2-PFDA (S)		100	95.3	%	95	(70-130)		
MSD_202104200382	13C2-PFDA (S)		100	93.1	%	93	(70-130)		
LCS1	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS2	13C2-PFHxA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFHxA (S)			102	%	102	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	100	%	100	(70-130)		
MS_202104200382	13C2-PFHxA (S)		100	99.8	%	100	(70-130)		
MSD_202104200382	13C2-PFHxA (S)		100	102	%	102	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	97.6	%	98	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	99.1	%	99	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MS_202104200382	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
MSD_202104200382	13C2-PFOA- IS#1 (I)		100	100	%	101	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	106	%	106	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	104	%	104	(70-130)		
MBLK	13C3-HFPO-DA (S)			102	%	102	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	102	%	102	(70-130)		
MS_202104200382	13C3-HFPO-DA (S)		100	98.7	%	99	(70-130)		
MSD_202104200382	13C3-HFPO-DA (S)		100	100	%	100	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	99.3	%	99	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	99.6	%	100	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			104	%	104	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202104200382	13C4-PFOS- IS#2 (I)		100	106	%	106	(50-150)		
MSD_202104200382	13C4-PFOS- IS#2 (I)		100	102	%	102	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0256	ug/L	108	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0256	ug/L	108	(70-130)	30	0.0
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00215	ug/L	114	(50-150)		
MS_202104200382	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00210	ug/L	110	(50-150)		
MSD_202104200382	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00212	ug/L	111	(50-150)	50	0.89
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0256	ug/L	110	(70-130)		
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0257	ug/L	110	(70-130)	30	0.39
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00215	ug/L	116	(50-150)		
MS_202104200382	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00214	ug/L	115	(50-150)		
MSD_202104200382	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00214	ug/L	115	(50-150)	50	0.066
LCS1	d3-NMeFOSAA (I)		100	96.1	%	96	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	97.4	%	97	(50-150)		
MBLK	d3-NMeFOSAA (I)			89.6	%	90	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	97.5	%	97	(50-150)		
MS_202104200382	d3-NMeFOSAA (I)		100	98.6	%	99	(50-150)		
MSD_202104200382	d3-NMeFOSAA (I)		100	95.8	%	96	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	93.8	%	94	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	91.8	%	92	(70-130)		
MBLK	d5-NEtFOSAA (S)			102	%	102	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	92.3	%	92	(70-130)		
MS_202104200382	d5-NEtFOSAA (S)		100	90.1	%	90	(70-130)		
MSD_202104200382	d5-NEtFOSAA (S)		100	92.8	%	93	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0263	ug/L	105	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0266	ug/L	106	(70-130)	30	1.1
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202104200382	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00220	ug/L	110	(50-150)		
MSD_202104200382	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00229	ug/L	115	(50-150)	50	4.0
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0255	ug/L	102	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0252	ug/L	101	(70-130)	30	1.2
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00208	ug/L	104	(50-150)		
MS_202104200382	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00220	ug/L	110	(50-150)		
MSD_202104200382	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00217	ug/L	108	(50-150)	50	1.3

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0264	ug/L	105	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0259	ug/L	104	(70-130)	30	1.9
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		
MS_202104200382	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00224	ug/L	112	(50-150)		
MSD_202104200382	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00236	ug/L	118	(50-150)	50	5.4
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0235	ug/L	106	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0246	ug/L	111	(70-130)	30	4.6
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00205	ug/L	116	(50-150)		
MS_202104200382	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00213	ug/L	120	(50-150)		
MSD_202104200382	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00215	ug/L	122	(50-150)	50	0.90
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0267	ug/L	107	(70-130)	30	1.9
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00229	ug/L	115	(50-150)		
MS_202104200382	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00222	ug/L	111	(50-150)		
MSD_202104200382	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00232	ug/L	116	(50-150)	50	4.4
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0262	ug/L	105	(70-130)	30	4.3
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00214	ug/L	107	(50-150)		
MS_202104200382	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00212	ug/L	106	(50-150)		
MSD_202104200382	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00211	ug/L	105	(50-150)	50	0.49
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0265	ug/L	106	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0268	ug/L	107	(70-130)	30	1.5
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00235	ug/L	118	(50-150)		
MS_202104200382	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00234	ug/L	115	(50-150)		
MSD_202104200382	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00232	ug/L	114	(50-150)	50	0.67
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0246	ug/L	108	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0254	ug/L	111	(70-130)	30	3.2
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00212	ug/L	116	(50-150)		
MS_202104200382	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00219	ug/L	115	(50-150)		
MSD_202104200382	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00225	ug/L	119	(50-150)	50	2.6
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0270	ug/L	108	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0273	ug/L	109	(70-130)	30	1.1

Spike recovery is already corrected for native results.
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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00232	ug/L	116	(50-150)		
MS_202104200382	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00249	ug/L	115	(50-150)		
MSD_202104200382	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00246	ug/L	114	(50-150)	50	1.3
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0276	ug/L	110	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0276	ug/L	110	(70-130)	30	0.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00244	ug/L	122	(50-150)		
MS_202104200382	Perfluorononanoic acid (PFNA)	ND	0.002	0.00229	ug/L	115	(50-150)		
MSD_202104200382	Perfluorononanoic acid (PFNA)	ND	0.002	0.00243	ug/L	122	(50-150)	50	5.9
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0249	ug/L	108	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0256	ug/L	111	(70-130)	30	2.8
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00219	ug/L	118	(50-150)		
MS_202104200382	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00211	ug/L	111	(50-150)		
MSD_202104200382	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00222	ug/L	117	(50-150)	50	5.3
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0272	ug/L	109	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0275	ug/L	110	(70-130)	30	1.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00254	ug/L	127	(50-150)		
MS_202104200382	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00254	ug/L	118	(50-150)		
MSD_202104200382	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00248	ug/L	115	(50-150)	50	2.6
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0292	ug/L	117	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0292	ug/L	117	(70-130)	30	0.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00264	ug/L	132	(50-150)		
MS_202104200382	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00261	ug/L	118	(50-150)		
MSD_202104200382	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00276	ug/L	125	(50-150)	50	5.7
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0271	ug/L	108	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0275	ug/L	110	(70-130)	30	1.5
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00228	ug/L	114	(50-150)		
MS_202104200382	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00229	ug/L	115	(50-150)		
MSD_202104200382	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00234	ug/L	117	(50-150)	50	2.0
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0261	ug/L	104	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0264	ug/L	105	(70-130)	30	1.1
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00207	ug/L	104	(50-150)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202104200382	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00230	ug/L	115	(50-150)		
MSD_202104200382	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00222	ug/L	111	(50-150)	50	3.5

EPA Method 537.1 by EPA 537.1

Prep Batch: 1323664 Analytical Batch: 1324216

Analysis Date: 04/28/2021

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
DUP_202104220564	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0477	ug/L	101	(70-130)		
LCS4	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.047	0.0503	ug/L	107	(70-130)	30	5.3
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00207	ug/L	110	(50-150)		
MS1_202104220570	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.024	0.0254	ug/L	108	(70-130)		
DUP_202104220564	13C2-PFDA (S)			108	%	108	(70-130)		
LCS3	13C2-PFDA (S)		100	99.1	%	99	(70-130)		
LCS4	13C2-PFDA (S)		100	105	%	105	(70-130)		
MBLK	13C2-PFDA (S)			93.5	%	94	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	104	%	104	(70-130)		
MS1_202104220570	13C2-PFDA (S)		100	101	%	101	(70-130)		
DUP_202104220564	13C2-PFHxA (S)			113	%	113	(70-130)		
LCS3	13C2-PFHxA (S)		100	108	%	108	(70-130)		
LCS4	13C2-PFHxA (S)		100	110	%	110	(70-130)		
MBLK	13C2-PFHxA (S)			106	%	106	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	108	%	108	(70-130)		
MS1_202104220570	13C2-PFHxA (S)		100	105	%	105	(70-130)		
DUP_202104220564	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
LCS3	13C2-PFOA- IS#1 (I)		100	103	%	103	(50-150)		
LCS4	13C2-PFOA- IS#1 (I)		100	104	%	104	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			109	%	109	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
MS1_202104220570	13C2-PFOA- IS#1 (I)		100	105	%	105	(50-150)		
DUP_202104220564	13C3-HFPO-DA (S)			111	%	111	(70-130)		
LCS3	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
LCS4	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MBLK	13C3-HFPO-DA (S)			99.7	%	100	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	107	%	107	(70-130)		
MS1_202104220570	13C3-HFPO-DA (S)		100	103	%	103	(70-130)		
DUP_202104220564	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
LCS3	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS4	13C4-PFOS- IS#2 (I)		100	98.8	%	99	(50-150)		

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	13C4-PFOS- IS#2 (I)			102	%	102	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	101	%	101	(50-150)		
MS1_202104220570	13C4-PFOS- IS#2 (I)		100	99.1	%	99	(50-150)		
DUP_202104220564	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND		ND	ug/L		(0-30)		
LCS3	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0485	ug/L	100	(70-130)		
LCS4	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.049	0.0491	ug/L	101	(70-130)	30	1.2
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00204	ug/L	108	(50-150)		
MS1_202104220570	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.024	0.0254	ug/L	107	(70-130)		
DUP_202104220564	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND		ND	ug/L		(0-30)		
LCS3	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0482	ug/L	104	(70-130)		
LCS4	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.047	0.0490	ug/L	105	(70-130)	30	1.4
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00216	ug/L	116	(50-150)		
MS1_202104220570	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.023	0.0250	ug/L	107	(70-130)		
DUP_202104220564	d3-NMeFOSAA (I)			102	%	102	(50-150)		
LCS3	d3-NMeFOSAA (I)		100	101	%	101	(50-150)		
LCS4	d3-NMeFOSAA (I)		100	98.3	%	98	(50-150)		
MBLK	d3-NMeFOSAA (I)			97.6	%	98	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	102	%	102	(50-150)		
MS1_202104220570	d3-NMeFOSAA (I)		100	100	%	100	(50-150)		
DUP_202104220564	d5-NEtFOSAA (S)			106	%	106	(70-130)		
LCS3	d5-NEtFOSAA (S)		100	93.4	%	93	(70-130)		
LCS4	d5-NEtFOSAA (S)		100	101	%	101	(70-130)		
MBLK	d5-NEtFOSAA (S)			97.6	%	98	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
MS1_202104220570	d5-NEtFOSAA (S)		100	97.5	%	98	(70-130)		
DUP_202104220564	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		ND	ug/L		(0-30)		
LCS3	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0512	ug/L	102	(70-130)		
LCS4	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.05	0.0502	ug/L	100	(70-130)	30	2.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00219	ug/L	110	(50-150)		
MS1_202104220570	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.025	0.0264	ug/L	106	(70-130)		
DUP_202104220564	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0496	ug/L	99	(70-130)		
LCS4	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0509	ug/L	102	(70-130)	30	2.6
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00220	ug/L	110	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS1_202104220570	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0266	ug/L	106	(70-130)		
DUP_202104220564	N-methyl Perfluorooctanesulfonamidoacetic acid	ND		ND	ug/L		(0-30)		
LCS3	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0501	ug/L	100	(70-130)		
LCS4	N-methyl Perfluorooctanesulfonamidoacetic acid		0.05	0.0516	ug/L	103	(70-130)	30	3.0
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00222	ug/L	111	(50-150)		
MS1_202104220570	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.025	0.0265	ug/L	106	(70-130)		
DUP_202104220564	Perfluorobutanesulfonic acid (PFBS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0465	ug/L	105	(70-130)		
LCS4	Perfluorobutanesulfonic acid (PFBS)		0.044	0.0475	ug/L	107	(70-130)	30	2.1
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00195	ug/L	110	(50-150)		
MS1_202104220570	Perfluorobutanesulfonic acid (PFBS)	ND	0.022	0.0255	ug/L	111	(70-130)		
DUP_202104220564	Perfluorodecanoic acid (PFDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorodecanoic acid (PFDA)		0.05	0.0506	ug/L	101	(70-130)		
LCS4	Perfluorodecanoic acid (PFDA)		0.05	0.0534	ug/L	107	(70-130)	30	5.4
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00228	ug/L	114	(50-150)		
MS1_202104220570	Perfluorodecanoic acid (PFDA)	ND	0.025	0.0274	ug/L	109	(70-130)		
DUP_202104220564	Perfluorododecanoic acid (PFDoA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorododecanoic acid (PFDoA)		0.05	0.0483	ug/L	97	(70-130)		
LCS4	Perfluorododecanoic acid (PFDoA)		0.05	0.0491	ug/L	98	(70-130)	30	1.6
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00207	ug/L	103	(50-150)		
MS1_202104220570	Perfluorododecanoic acid (PFDoA)	ND	0.025	0.0260	ug/L	104	(70-130)		
DUP_202104220564	Perfluoroheptanoic acid (PFHpA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroheptanoic acid (PFHpA)		0.05	0.0524	ug/L	105	(70-130)		
LCS4	Perfluoroheptanoic acid (PFHpA)		0.05	0.0532	ug/L	107	(70-130)	30	1.7
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00234	ug/L	117	(50-150)		
MS1_202104220570	Perfluoroheptanoic acid (PFHpA)	0.0025	0.025	0.0299	ug/L	110	(70-130)		
DUP_202104220564	Perfluorohexanesulfonic acid (PFHxS)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0503	ug/L	110	(70-130)		
LCS4	Perfluorohexanesulfonic acid (PFHxS)		0.046	0.0495	ug/L	109	(70-130)	30	1.6
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00203	ug/L	111	(50-150)		
MS1_202104220570	Perfluorohexanesulfonic acid (PFHxS)	ND	0.023	0.0268	ug/L	113	(70-130)		
DUP_202104220564	Perfluorohexanoic acid (PFHxA)	ND		ND	ug/L		(0-30)		

Spike recovery is already corrected for native results.
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 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS3	Perfluorohexanoic acid (PFHxA)		0.05	0.0526	ug/L	105	(70-130)		
LCS4	Perfluorohexanoic acid (PFHxA)		0.05	0.0524	ug/L	105	(70-130)	30	0.38
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00222	ug/L	111	(50-150)		
MS1_202104220570	Perfluorohexanoic acid (PFHxA)	0.0027	0.025	0.0293	ug/L	107	(70-130)		
DUP_202104220564	Perfluorononanoic acid (PFNA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorononanoic acid (PFNA)		0.05	0.0517	ug/L	103	(70-130)		
LCS4	Perfluorononanoic acid (PFNA)		0.05	0.0522	ug/L	104	(70-130)	30	0.96
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00240	ug/L	120	(50-150)		
MS1_202104220570	Perfluorononanoic acid (PFNA)	ND	0.025	0.0284	ug/L	113	(70-130)		
DUP_202104220564	Perfluorooctanesulfonic acid (PFOS)	0.0020		ND	ug/L		(0-30)		
LCS3	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0479	ug/L	103	(70-130)		
LCS4	Perfluorooctanesulfonic acid (PFOS)		0.046	0.0489	ug/L	106	(70-130)	30	2.1
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00214	ug/L	116	(50-150)		
MS1_202104220570	Perfluorooctanesulfonic acid (PFOS)	0.0046	0.023	0.0295	ug/L	108	(70-130)		
DUP_202104220564	Perfluorooctanoic acid (PFOA)	0.0025		ND	ug/L		(0-30)		
LCS3	Perfluorooctanoic acid (PFOA)		0.05	0.0531	ug/L	106	(70-130)		
LCS4	Perfluorooctanoic acid (PFOA)		0.05	0.0537	ug/L	107	(70-130)	30	1.1
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00252	ug/L	126	(50-150)		
MS1_202104220570	Perfluorooctanoic acid (PFOA)	0.0057	0.025	0.0326	ug/L	108	(70-130)		
DUP_202104220564	Perfluorotetradecanoic acid (PFTA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotetradecanoic acid (PFTA)		0.05	0.0526	ug/L	105	(70-130)		
LCS4	Perfluorotetradecanoic acid (PFTA)		0.05	0.0554	ug/L	111	(70-130)	30	5.0
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00245	ug/L	122	(50-150)		
MS1_202104220570	Perfluorotetradecanoic acid (PFTA)	ND	0.025	0.0281	ug/L	112	(70-130)		
DUP_202104220564	Perfluorotridecanoic acid (PFTrDA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0491	ug/L	98	(70-130)		
LCS4	Perfluorotridecanoic acid (PFTrDA)		0.05	0.0501	ug/L	100	(70-130)	30	2.0
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00215	ug/L	107	(50-150)		
MS1_202104220570	Perfluorotridecanoic acid (PFTrDA)	ND	0.025	0.0263	ug/L	105	(70-130)		
DUP_202104220564	Perfluoroundecanoic acid (PFUnA)	ND		ND	ug/L		(0-30)		
LCS3	Perfluoroundecanoic acid (PFUnA)		0.05	0.0499	ug/L	100	(70-130)		
LCS4	Perfluoroundecanoic acid (PFUnA)		0.05	0.0517	ug/L	103	(70-130)	30	3.5

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 931039
 Project: 0250000
 Group: WRD Pilot [Set #2]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00214	ug/L	107	(50-150)		
MS1_202104220570	Perfluoroundecanoic acid (PFUnA)	ND	0.025	0.0264	ug/L	106	(70-130)		

Dissolved Organic Carbon by SM 5310C

Analytical Batch: 1324825

Analysis Date: 05/02/2021

LCS1	Dissolved Organic Carbon		5	5.21	mg/L	104	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.34	mg/L	107	(90-110)	20	2.5
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.266	mg/L	133	(50-150)		
MS_202105020070	Dissolved Organic Carbon	8.1	4	51.4	mg/L	108	(80-120)		
MS2_202105020071	Dissolved Organic Carbon	1.3	2	3.46	mg/L	109	(80-120)		
MSD_202105020070	Dissolved Organic Carbon	8.1	4	51.3	mg/L	108	(80-120)	20	0.25
MSD2_202105020071	Dissolved Organic Carbon	1.3	2	3.42	mg/L	107	(80-120)	20	1.1

Total Organic Carbon by SM 5310C

Analytical Batch: 1325001

Analysis Date: 05/04/2021

LCS1	Total Organic Carbon		5	5.31	mg/L	106	(90-110)		
LCS2	Total Organic Carbon		5	5.29	mg/L	106	(90-110)	20	0.38
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.281	mg/L	141	(50-150)		
MS_202104220351	Total Organic Carbon	0.80	4	4.96	mg/L	104	(80-120)		
MS2_202104210569	Total Organic Carbon	4.8	2	15.5	mg/L	107	(80-120)		
MSD_202104220351	Total Organic Carbon	0.80	4	4.98	mg/L	105	(80-120)	20	0.40
MSD2_202104210569	Total Organic Carbon	4.8	2	15.6	mg/L	108	(80-120)	20	0.87

Total Organic Carbon by SM 5310C

Analytical Batch: 1325830

Analysis Date: 05/05/2021

LCS1	Total Organic Carbon		5	5.32	mg/L	106	(90-110)		
LCS2	Total Organic Carbon		5	5.30	mg/L	106	(90-110)	20	0.38
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.261	mg/L	131	(50-150)		
MS_202104230605	Total Organic Carbon	0.68	4	4.89	mg/L	105	(80-120)		
MS2_202104220470	Total Organic Carbon	0.88	2	3.20	mg/L	116	(80-120)		
MSD_202104230605	Total Organic Carbon	0.68	4	4.92	mg/L	106	(80-120)	20	0.53
MSD2_202104220470	Total Organic Carbon	0.88	2	3.07	mg/L	109	(80-120)	20	4.3

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL	Presence/Absence (P/A)*	
					Fecal Coliform Small	Fecal Coliform Large	Fecal Coliform		Fecal Coliform	

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 05/07/2021

**Report of Analysis by 18-Hour Collilert Test for
Presence or Absence, Quantification of Total Coliform and E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
 Comment: _____
 Approved by: _____

Date of Issue: 05/07/2021

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 05/07/2021

, Tel Fax

Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:

**Report of Analysis by 24-Hour Colilert Test for
Presence or Absence, Quantification of Total Coliform and E. Coli
By Quantitray**

Project:
 Phone #:
 Date Received:
 Sampled By:
 Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Positive Wells			MPN/100 mL			Presence/Absence (P/A)*		
					Total Coliform Small	Total Coliform Large	E. Coli Small	Total Coliform	Total Coliform	E. Coli Large	Total Coliform	Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 05/07/2021

Quant Report - Page 1 of 1

, Tel Fax

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Laboratory Report

for

Water Replenishment District
4040 Paramount Blvd.
Lakewood, CA 90712
Attention: Joseph Liles



Utah ELCP CA00006

SFL: Sophia F Liang
Project Manager

Report: 936465
Project: 0250000
Group: WRD Pilot [Set #1]

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* Following the cover page are State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms, as applicable.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	Certified
Arkansas	Certified	Nevada	CA000062018
California	2813	New Hampshire *	2959
Colorado	Certified	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	Certified
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	18-005R	Oregon *	CA200003-005
Hawaii	Certified	Pennsylvania *	68-565
Idaho	Certified	Puerto Rico	Certified
Illinois *	200033	Rhode Island	LAO00326
Indiana	C-CA-01	South Carolina	87016
Iowa - Asbestos	413	South Dakota	Certified
Kansas *	E-10268	Tennessee	TN02839
Kentucky	90107	Texas *	T104704230-18-15
Louisiana *	LA180000	Utah (Primary AB) *	CA00006
Maine	CA0006	Vermont	VT0114
Maryland	224	Virginia *	460260
Commonwealth of Northern Marianas Is.	MP0004	Washington	C838
Massachusetts	M-CA006	EPA Region 5	Certified
Michigan	9906	Los Angeles County Sanitation Districts	10264
Mississippi	Certified		

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025 Accredited Method List

The tests listed below are accredited and meet the requirements of ISO/IEC 17025 as verified by the ANSI-ASQ National Accreditation Board/A2LA.
Refer to Certificate and scope of accreditation (5890) found at: <https://www.eurofinsus.com/Eaton>

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
1,2,3-TCP (5 PPT & 0.5 PPT)	CA SRL 524M-TCP	x		x
1,4-Dioxane	EPA 522	x		x
2,3,7,8-TCDD	Modified EPA 1613B	x		x
Acrylamide	In House Method (2440)	x		x
Algal Toxins/Microcystin	In House Method (3570)			
Alkalinity	SM 2320B	x	x	x
Ammonia	EPA 350.1		x	x
Ammonia	SM 4500-NH3 H		x	x
Anions and DBPs by IC	EPA 300.0	x	x	x
Anions and DBPs by IC	EPA 300.1	x		x
Asbestos	EPA 100.2	x	x	
BOD / CBOD	SM 5210B		x	x
Bromate	In House Method (2447)	x		x
Carbamates	EPA 531.2	x		x
Carbonate as CO3	SM 2330B	x	x	x
Carbonyls	EPA 556	x		x
COD	EPA 410.4 / SM 5220D		x	
Chloramines	SM 4500-CL G	x	x	x
Chlorinated Acids	EPA 515.4	x		x
Chlorinated Acids	EPA 555	x		x
Chlorine Dioxide	SM 4500-CLO2 D Palin Test	x		x
Chlorine -Total/Free/ Combined Residual	SM 4500-Cl G	x	x	x
Conductivity	EPA 120.1		x	
Conductivity	SM 2510B	x	x	x
Corrosivity (Langelier Index)	SM 2330B	x		x
Cyanide, Amenable	SM 4500-CN G	x	x	
Cyanide, Free	SM 4500CN F	x	x	x
Cyanide, Total	EPA 335.4	x	x	x
Cyanogen Chloride (screen)	In House Method (2470)	x		x
Diquat and Paraquat	EPA 549.2	x		x
DBP/HAA	SM 6251B	x		x
Dissolved Oxygen	SM 4500-O G		x	x
DOC	SM 5310C	x		x
E. Coli (MTF/EC+MUG)		x		x
E. Coli (CFR 141.21(f)(6)(i))		x		x
E. Coli (SM 9223)	SM 9223		x	
E. Coli (Enumeration)	SM 9221B.1/ SM 9221F	x		x
E. Coli (Enumeration)	SM 9223B	x		x
EDB/DCBP	EPA 504.1	x		
EDB/DBCP and DBP	EPA 551.1	x		x
EDTA and NTA	In House Method (2454)	x		x
Endothall	EPA 548.1	x		x
Endothall	In-house Method (2445)	x		x
Enterococci	SM 9230B	x	x	
Fecal Coliform	SM 9221 E (MTF/EC)	x		
Fecal Coliform	SM 9221C, E (MTF/EC)		x	
Fecal Coliform (Enumeration)	SM 9221E (MTF/EC)	x		x
Fecal Coliform with Chlorine Present	SM 9221E		x	
Fecal Streptococci	SM 9230B	x	x	
Fluoride	SM 4500-F C	x	x	x
Glyphosate	EPA 547	x		x
Glyphosate + AMPA	In House Method (3618)	x		x
Gross Alpha/Beta	EPA 900.0	x	x	x
Gross Alpha Coprecipitation	SM 7110 C	x	x	x
Hardness	SM 2340B	x	x	x
Heterotrophic Bacteria	In House Method (2439)	x		x
Heterotrophic Bacteria	SM 9215 B	x		x
Hexavalent Chromium	EPA 218.6	x	x	x

SPECIFIC TESTS	METHOD OR TECHNIQUE USED	Environmental (Drinking Water)	Environmental (Waste Water)	Water as a Component of Food and Bev/Bev/ Bottled Water
Hexavalent Chromium	EPA 218.7	x		x
Hexavalent Chromium	SM 3500-Cr B		x	
Hormones	EPA 539	x		x
Hydroxide as OH Calc.	SM 2330B	x		x
Kjeldahl Nitrogen	EPA 351.2		x	
Legionella	Legiolert	x		x
Mercury	EPA 200.8	x		x
Metals	EPA 200.7 / 200.8	x	x	x
Microcystin LR	ELISA (2360)	x		x
Microcystin, Total	EPA 546	x		x
NDMA	EEA/Agilent 521.1 In house method (2425)	x		x
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x	x
OCL, Pesticides/PCB	EPA 505	x		x
Ortho Phosphate	EPA 365.1	x	x	x
Ortho Phosphorous	SM 4500P E	x		x
Oxyhalides Disinfection Byproducts	EPA 317.0	x		x
Perchlorate	EPA 331.0	x		x
Perchlorate (low and high)	EPA 314.0	x		x
Perfluorinated Alkyl Acids	EPA 537	x		x
Perfluorinated Pollutant	In house Method (2434)	x		x
pH	EPA 150.1	x		
pH	SM 4500-H+B	x	x	x
Phenylurea Pesticides/ Herbicides	In House Method, based on EPA 532 (2448)	x		x
Pseudomonas	IDEXX Pseudalert (2461)	x		x
Radium-226	GA Institute of Tech	x		x
Radium-228	GA Institute of Tech	x		x
Radon-222	SM 7500RN	x		x
Residue, Filterable	SM 2540C	x	x	x
Residue, Non-filterable	SM 2540D		x	
Residue, Total	SM 2540B		x	x
Residue, Volatile	EPA 160.4		x	
Semi-VOC	EPA 525.2	x		x
Silica	SM 4500-Si D	x	x	
Silica	SM 4500-SiO2 C	x	x	
Sulfide	SM 4500-S ²⁻ D		x	
Sulfite	SM 4500-SO ³⁻ B	x	x	x
Surfactants	SM 5540C	x	x	x
Taste and Odor Analytes	SM 6040E	x		x
Total Coliform (P/A)	SM 9221 A, B	x		x
Total Coliform (Enumeration)	SM 9221 A, B, C	x		x
Total Coliform / E. coli	Colisure SM 9223	x		x
Total Coliform	SM 9221B		x	
Total Coliform with Chlorine Present	SM 9221B		x	
Total Coliform / E.coli (P/A and Enumeration)	SM 9223	x		x
TOC	SM 5310C	x	x	x
TOX	SM 5320B		x	
Total Phenols	EPA 420.1		x	
Total Phenols	EPA 420.4	x	x	x
Total Phosphorous	SM 4500 P E		x	
Triazine Pesticides & Degradates	In House (3617)	x		x
Turbidity	EPA 180.1	x	x	x
Turbidity	SM 2130B	x	x	
Uranium by ICP/MS	EPA 200.8	x		x
UV 254	SM 5910B	x		
VOC	EPA 524.2	x		x
VOC	In House Method (2411)	x		x
Yeast and Mold	SM 9610	x		x
Field Sampling	N/A			

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
 4040 Paramount Blvd.
 Lakewood, CA 90712

Client ID: WRD
 Folder #: 936465
 Project: 0250000
 Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
 Phone: 562-275-4226

Project Manager: Sophia F Liang
 Phone:

The following samples were received from you on **May 20, 2021 at 1400**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202105200575</u>	GAC-1-20210520	05/20/2021 0933
	@537.1	
<u>202105200576</u>	GAC-2-20210520	05/20/2021 0936
	@537.1	
<u>202105200577</u>	GAC-3-20210520	05/20/2021 0939
	@537.1	
<u>202105200578</u>	GAC-4-20210520	05/20/2021 0942
	@537.1	
<u>202105200579</u>	IX-1-20210520	05/20/2021 0945
	@537.1	
<u>202105200580</u>	IX-2-20210520	05/20/2021 0948
	@537.1	
<u>202105200581</u>	IX-3-20210520	05/20/2021 0951
	@537.1	
<u>202105200582</u>	IX-4-20210520	05/20/2021 0954
	@537.1	
<u>202105200583</u>	GAC-1M-20210520	05/20/2021 0957
	@537.1	
<u>202105200584</u>	GAC-2M-20210520	05/20/2021 1000
	@537.1	
<u>202105200585</u>	GAC-3M-20210520	05/20/2021 1003
	@537.1	
<u>202105200586</u>	GAC-4M-20210520	05/20/2021 1006
	@537.1	
<u>202105200587</u>	IX-1M-20210520	05/20/2021 1009
	@537.1	

Acknowledgement of Samples Received

Addr: **Water Replenishment District**
4040 Paramount Blvd.
Lakewood, CA 90712

Client ID: WRD
Folder #: 936465
Project: 0250000
Sample Group: WRD Pilot [Set #1]

Attn: Joseph Liles
Phone: 562-275-4226

Project Manager: Sophia F Liang
Phone:

The following samples were received from you on **May 20, 2021** at **1400**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

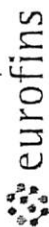
Sample #	Sample ID	Sample Date
202105200588	IX-2M-20210520	05/20/2021 1012
	@537.1	
202105200589	IX-3M-20210520	05/20/2021 1015
	@537.1	
202105200590	IX-4M-20210520	05/20/2021 1018
	@537.1	
202105200592	LH-INF-20210520	05/20/2021 1021
	@537.1	
	@ANIONS48	@VOASDWA
	Alkalinity in CaCO3 units	Calcium Total ICAP
	Chloride	Hexavalent chromium(Dissolved)
	Iron Total ICAP	Magnesium Total ICAP
	Manganese Total ICAP/MS	Potassium Total ICAP
	Sodium Total ICAP	Total Dissolved Solid (TDS)
	Total Hardness as CaCO3 by ICP	Total Suspended Solids (TSS)
	Uranium by ICPMS as pCi/L	
	Uranium ICAP/MS	

Test Description

@537.1 -- EPA Method 537.1

@ANIONS48 -- Nitrate, Nitrite by EPA 300.0

@VOASDWA -- Volatile Organics by GCMS



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 936465

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.
SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 618A (Observation = 15.6 °C) (Corr. Factor = 0.2 °C) (Final = 15.4 °C)

TYPE OF ICE: Real ✓ Synthetic _____ No Ice _____ Condition of Ice: Frozen ✓ Partially Frozen _____ Thawed _____ N/A _____

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)
3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)	4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: _____ Lot Number: _____ pH strip type: 0 - 14 or _____ Expiration Date: _____ Results: _____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: _____ Expiration Date: _____ Results: _____

7) VOA and Radon Headspace: No Samples with Headspace: Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)
Exempt from headspace concerns: Methods 615.4, HAA(6251,662), 505, SPME, @CH, 532LCMS, 566, 536, Anatoxin, LCMS methods using 40 ml vials, International clients: _____

Samp ID	Bottle #	None/<6	>6mm	Samp ID	Bottle #	None/<6	>6mm
0351	1						

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): _____

RECEIVED BY: [Signature] PRINT NAME: YIM1 COMPANY/TITLE: Eurofins Eaton Analytical DATE: 5/20/24 TIME: 14:00

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 936465
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District
Joseph Liles
4040 Paramount Blvd.
Lakewood, CA 90712

Folder Comments

Analytical results for Oil and Grease are submitted by Eurofins Calscience in Garden Grove,
CAELAP 2944 exp 9-30-2021

Flags Legend:

B4 - Target analyte detected in blank at or above method acceptance criteria.
HA - Initial analysis within holding time. Reanalysis was past holding time.

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202105200575 <u>GAC-1-20210520</u>						
05/24/2021 17:45	Perfluorobutanesulfonic acid (PFBS)		0.0026		ug/L	0.0020
05/24/2021 17:45	Perfluorohexanoic acid (PFHxA)		0.0024		ug/L	0.0020
202105200576 <u>GAC-2-20210520</u>						
05/24/2021 17:55	Perfluorobutanesulfonic acid (PFBS)		0.0053		ug/L	0.0020
202105200577 <u>GAC-3-20210520</u>						
05/24/2021 18:04	Perfluorobutanesulfonic acid (PFBS)		0.0061		ug/L	0.0020
05/24/2021 18:04	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
202105200579 <u>IX-1-20210520</u>						
05/24/2021 18:24	Perfluorohexanoic acid (PFHxA)		0.0043		ug/L	0.0020
05/24/2021 18:24	Perfluorooctanoic acid (PFOA)		0.0052		ug/L	0.0020
202105200580 <u>IX-2-20210520</u>						
05/24/2021 18:33	Perfluoroheptanoic acid (PFHpA)		0.0023		ug/L	0.0020
05/24/2021 18:33	Perfluorohexanoic acid (PFHxA)		0.0045		ug/L	0.0020
05/24/2021 18:33	Perfluorooctanoic acid (PFOA)		0.0060		ug/L	0.0020
202105200581 <u>IX-3-20210520</u>						
05/24/2021 18:43	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
05/24/2021 18:43	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
05/24/2021 18:43	Perfluorooctanoic acid (PFOA)		0.011		ug/L	0.0020
202105200582 <u>IX-4-20210520</u>						
05/24/2021 18:53	Perfluoroheptanoic acid (PFHpA)		0.0024		ug/L	0.0020
05/24/2021 18:53	Perfluorohexanoic acid (PFHxA)		0.0045		ug/L	0.0020
05/24/2021 18:53	Perfluorooctanoic acid (PFOA)		0.0062		ug/L	0.0020
202105200583 <u>GAC-1M-20210520</u>						
05/24/2021 19:02	Perfluorobutanesulfonic acid (PFBS)		0.0063		ug/L	0.0020
05/24/2021 19:02	Perfluorohexanesulfonic acid (PFHxS)		0.0037		ug/L	0.0020
05/24/2021 19:02	Perfluorohexanoic acid (PFHxA)		0.0041		ug/L	0.0020
05/24/2021 19:02	Perfluorooctanesulfonic acid (PFOS)		0.010		ug/L	0.0020
05/24/2021 19:02	Perfluorooctanoic acid (PFOA)		0.0093		ug/L	0.0020
202105200584 <u>GAC-2M-20210520</u>						
05/24/2021 19:23	Perfluorobutanesulfonic acid (PFBS)		0.0051		ug/L	0.0020
05/24/2021 19:23	Perfluorohexanesulfonic acid (PFHxS)		0.0027		ug/L	0.0020
05/24/2021 19:23	Perfluorohexanoic acid (PFHxA)		0.0034		ug/L	0.0020
05/24/2021 19:23	Perfluorooctanoic acid (PFOA)		0.0062		ug/L	0.0020

SUMMARY OF POSITIVE DATA ONLY

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
202105200585 <u>GAC-3M-20210520</u>						
05/24/2021 19:34	Perfluorobutanesulfonic acid (PFBS)		0.0059		ug/L	0.0020
05/24/2021 19:34	Perfluorohexanesulfonic acid (PFHxS)		0.0043		ug/L	0.0020
05/24/2021 19:34	Perfluorohexanoic acid (PFHxA)		0.0039		ug/L	0.0020
05/24/2021 19:34	Perfluorooctanesulfonic acid (PFOS)		0.010		ug/L	0.0020
05/24/2021 19:34	Perfluorooctanoic acid (PFOA)		0.0094		ug/L	0.0020
202105200586 <u>GAC-4M-20210520</u>						
05/24/2021 19:44	Perfluorobutanesulfonic acid (PFBS)		0.0028		ug/L	0.0020
05/24/2021 19:44	Perfluorohexanoic acid (PFHxA)		0.0020		ug/L	0.0020
05/24/2021 19:44	Perfluorooctanesulfonic acid (PFOS)		0.0035		ug/L	0.0020
05/24/2021 19:44	Perfluorooctanoic acid (PFOA)		0.0031		ug/L	0.0020
202105200587 <u>IX-1M-20210520</u>						
05/24/2021 19:53	Perfluorobutanesulfonic acid (PFBS)		0.0023		ug/L	0.0020
05/24/2021 19:53	Perfluorohexanoic acid (PFHxA)		0.0033		ug/L	0.0020
05/24/2021 19:53	Perfluorooctanesulfonic acid (PFOS)		0.0057		ug/L	0.0020
05/24/2021 19:53	Perfluorooctanoic acid (PFOA)		0.0080		ug/L	0.0020
202105200588 <u>IX-2M-20210520</u>						
05/24/2021 20:03	Perfluorobutanesulfonic acid (PFBS)		0.0020		ug/L	0.0020
05/24/2021 20:03	Perfluorohexanoic acid (PFHxA)		0.0038		ug/L	0.0020
05/24/2021 20:03	Perfluorooctanesulfonic acid (PFOS)		0.0026		ug/L	0.0020
05/24/2021 20:03	Perfluorooctanoic acid (PFOA)		0.0086		ug/L	0.0020
202105200589 <u>IX-3M-20210520</u>						
05/24/2021 20:12	Perfluorobutanesulfonic acid (PFBS)		0.0037		ug/L	0.0020
05/24/2021 20:12	Perfluorohexanoic acid (PFHxA)		0.0037		ug/L	0.0020
05/24/2021 20:12	Perfluorooctanesulfonic acid (PFOS)		0.0042		ug/L	0.0020
05/24/2021 20:12	Perfluorooctanoic acid (PFOA)		0.0087		ug/L	0.0020
202105200590 <u>IX-4M-20210520</u>						
05/24/2021 20:22	Perfluorobutanesulfonic acid (PFBS)		0.0043		ug/L	0.0020
05/24/2021 20:22	Perfluoroheptanoic acid (PFHpA)		0.0021		ug/L	0.0020
05/24/2021 20:22	Perfluorohexanesulfonic acid (PFHxS)		0.0020		ug/L	0.0020
05/24/2021 20:22	Perfluorohexanoic acid (PFHxA)		0.0040		ug/L	0.0020
05/24/2021 20:22	Perfluorononanoic acid (PFNA)		0.0023		ug/L	0.0020
05/24/2021 20:22	Perfluorooctanesulfonic acid (PFOS)		0.0061		ug/L	0.0020
05/24/2021 20:22	Perfluorooctanoic acid (PFOA)		0.013		ug/L	0.0020
202105200592 <u>LH-INF-20210520</u>						

SUMMARY OF POSITIVE DATA ONLY

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
05/26/2021 23:44	Alkalinity in CaCO3 units		200		mg/L	2.0
05/26/2021 21:18	Arsenic Total ICAP/MS		2.7	10	ug/L	1.0
06/01/2021 12:47	Calcium Total ICAP		110		mg/L	1.0
05/21/2021 04:33	Chloride		100	250	mg/L	2.5
05/28/2021 1:59	Chloroform (Trichloromethane)		0.81		ug/L	0.50
06/07/2021 21:35	Dissolved Organic Carbon		0.84		mg/L	0.20
05/30/2021 15:51	Hexavalent chromium(Dissolved)		0.74		ug/L	0.020
06/01/2021 12:47	Magnesium Total ICAP		21		mg/L	0.10
05/21/2021 04:33	Nitrate as Nitrogen by IC		3.0	10	mg/L	0.50
05/21/2021 04:33	Nitrate as NO3 (calc)		13	45	mg/L	2.2
05/24/2021 20:32	Perfluorobutanesulfonic acid (PFBS)		0.0069		ug/L	0.0020
05/24/2021 20:32	Perfluorohexanesulfonic acid (PFHxS)		0.0061		ug/L	0.0020
05/24/2021 20:32	Perfluorohexanoic acid (PFHxA)		0.0042		ug/L	0.0020
05/24/2021 20:32	Perfluorononanoic acid (PFNA)		0.0029		ug/L	0.0020
05/24/2021 20:32	Perfluorooctanesulfonic acid (PFOS)		0.030		ug/L	0.0020
05/24/2021 20:32	Perfluorooctanoic acid (PFOA)		0.012		ug/L	0.0020
06/01/2021 12:47	Potassium Total ICAP		4.6		mg/L	1.0
06/01/2021 12:47	Sodium Total ICAP		71		mg/L	1.0
05/21/2021 04:33	Sulfate		160	250	mg/L	2.5
05/26/2021 22:31	Total Dissolved Solids (TDS)		650	500	mg/L	10
06/01/2021 15:27	Total Hardness as CaCO3 by ICP (calc)		360		mg/L	3.0
05/21/2021 04:33	Total Nitrate, Nitrite-N, CALC		3.0		mg/L	0.10
05/29/2021 02:12	Total Organic Carbon		1.1		mg/L	0.20
05/28/2021 1:59	Total THM		0.81	80	ug/L	0.50
05/27/2021 14:28	Uranium by ICPMS as pCi/L		3.4		pCi/L	0.70
05/26/2021 21:18	Uranium ICAP/MS		5.2	30	ug/L	1.0

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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
GAC-1-20210520 (202105200575)					Sampled on 05/20/2021 0933				
EPA 537.1 - EPA Method 537.1									
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0026	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0024	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	13C2-PFDA	91	%		1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	13C2-PFHxA	101	%		1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	89	%		1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	94	%		1
05/21/21	05/24/21 17:45	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	106	%		1

GAC-2-20210520 (202105200576)					Sampled on 05/20/2021 0936				
EPA 537.1 - EPA Method 537.1									
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
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 Lakewood, CA 90712

Samples Received on:
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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0053	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	13C2-PFDA	90	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	13C2-PFHxA	100	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	119	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	89	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	94	%		1
05/21/21	05/24/21 17:55	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	107	%		1

GAC-3-20210520 (202105200577)

Sampled on 05/20/2021 0939

EPA 537.1 - EPA Method 537.1

05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	11-chloroeicosfluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0061	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	13C2-PFDA	91	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	13C2-PFHxA	105	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	116	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	90	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	95	%		1
05/21/21	05/24/21 18:04	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	103	%		1

GAC-4-20210520 (202105200578)

Sampled on 05/20/2021 0942

EPA 537.1 - EPA Method 537.1

05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	ND	ug/L	0.0020	1

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Report: 936465
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 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	13C2-PFDA	93	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	13C2-PFHxA	101	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	123	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	84	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	101	%		1
05/21/21	05/24/21 18:14	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	101	%		1

IX-1-20210520 (202105200579)

Sampled on 05/20/2021 0945

EPA 537.1 - EPA Method 537.1

05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0043	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0052	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

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Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	13C2-PFDA	108	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	13C2-PFHxA	112	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	103	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	103	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	97	%		1
05/21/21	05/24/21 18:24	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	110	%		1

IX-2-20210520 (202105200580)

Sampled on 05/20/2021 0948

EPA 537.1 - EPA Method 537.1

05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0023	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0045	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0060	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	13C2-PFDA	102	%		1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	13C2-PFHxA	114	%		1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	106	%		1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	103	%		1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	95	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 18:33	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	104	%		1
IX-3-20210520 (202105200581)					Sampled on 05/20/2021 0951				
EPA 537.1 - EPA Method 537.1									
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.011	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	13C2-PFDA	100	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	13C2-PFHxA	109	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	112	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	95	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	99	%		1
05/21/21	05/24/21 18:43	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	104	%		1

IX-4-20210520 (202105200582)					Sampled on 05/20/2021 0954				
EPA 537.1 - EPA Method 537.1									
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0024	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0045	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0062	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	13C2-PFDA	100	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	13C2-PFHxA	107	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	110	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	94	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	97	%		1
05/21/21	05/24/21 18:53	1329480	1330214	(EPA 537.1)	d5-NETFOSAA	107	%		1

GAC-1M-20210520 (202105200583)

Sampled on 05/20/2021 0957

EPA 537.1 - EPA Method 537.1

05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0063	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0037	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0041	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.010	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0093	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	13C2-PFDA	99	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	13C2-PFHxA	113	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	103	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	102	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	96	%		1
05/21/21	05/24/21 19:02	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	102	%		1

GAC-2M-20210520 (202105200584)

Sampled on 05/20/2021 1000

EPA 537.1 - EPA Method 537.1

05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0051	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0027	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0034	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0062	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	13C2-PFDA	102	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	13C2-PFHxA	111	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	102	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	102	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	104	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	94	%		1
05/21/21	05/24/21 19:23	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	104	%		1

GAC-3M-20210520 (202105200585)

Sampled on 05/20/2021 1003

EPA 537.1 - EPA Method 537.1

05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0059	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0043	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0039	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.010	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0094	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100
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 1 800 566 LABS (1 800 566 5227)

Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	13C2-PFDA	107	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	13C2-PFHxA	116	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	104	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	99	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	96	%		1
05/21/21	05/24/21 19:34	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	103	%		1

GAC-4M-20210520 (202105200586)

Sampled on 05/20/2021 1006

EPA 537.1 - EPA Method 537.1

05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0028	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0020	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0035	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0031	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	13C2-PFDA	90	%		1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	13C2-PFHxA	112	%		1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	102	%		1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	94	%		1

Rounding on totals after summation.
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Tel: (626) 386-1100
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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 19:44	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	90	%		1
IX-1M-20210520 (202105200587)					Sampled on 05/20/2021 1009				
EPA 537.1 - EPA Method 537.1									
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0023	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0033	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0057	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0080	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	13C2-PFDA	103	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	13C2-PFHxA	115	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	105	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	103	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	97	%		1
05/21/21	05/24/21 19:53	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	109	%		1

IX-2M-20210520 (202105200588)					Sampled on 05/20/2021 1012				
EPA 537.1 - EPA Method 537.1									
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0020	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0038	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0026	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0086	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	13C2-PFDA	107	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	13C2-PFHxA	107	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	95	%		1
05/21/21	05/24/21 20:03	1329480	1330214	(EPA 537.1)	d5-NETFOSAA	109	%		1

IX-3M-20210520 (202105200589)

Sampled on 05/20/2021 1015

EPA 537.1 - EPA Method 537.1

05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	11-chloroeicosafafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0037	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0037	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0042	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.0087	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	13C2-PFDA	106	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	13C2-PFHxA	114	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	103	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	104	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	97	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	96	%		1
05/21/21	05/24/21 20:12	1329480	1330214	(EPA 537.1)	d5-NEtFOSAA	111	%		1

IX-4M-20210520 (202105200590)

Sampled on 05/20/2021 1018

EPA 537.1 - EPA Method 537.1

05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0043	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	0.0021	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0020	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0040	ug/L	0.0020	1

Rounding on totals after summation.
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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0023	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.0061	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.013	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	13C2-PFDA	108	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	13C2-PFHxA	116	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	100	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	105	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	95	%		1
05/21/21	05/24/21 20:22	1329480	1330214	(EPA 537.1)	d5-NEFOSAA	111	%		1

LH-INF-20210520 (202105200592)

Sampled on 05/20/2021 1021

EPA 200.8 - ICPMS Metals

05/21/21	05/26/21 21:18	1329489	1330338	(EPA 200.8)	Arsenic Total ICAP/MS	2.7	ug/L	1.0	1
05/21/21	05/26/21 21:18	1329489	1330338	(EPA 200.8)	Manganese Total ICAP/MS	ND	ug/L	2.0	1
05/21/21	05/26/21 21:18	1329489	1330338	(EPA 200.8)	Uranium ICAP/MS	5.2	ug/L	1.0	1

EPA 200.7 - ICP Metals

05/21/21	06/01/21 12:47	1329489	1331521	(EPA 200.7)	Calcium Total ICAP	110	mg/L	1.0	1
05/21/21	06/01/21 12:47	1329489	1331521	(EPA 200.7)	Iron Total ICAP	ND	mg/L	0.010	1
05/21/21	06/01/21 12:47	1329489	1331521	(EPA 200.7)	Magnesium Total ICAP	21	mg/L	0.10	1
05/21/21	06/01/21 12:47	1329489	1331521	(EPA 200.7)	Potassium Total ICAP	4.6	mg/L	1.0	1
05/21/21	06/01/21 12:47	1329489	1331521	(EPA 200.7)	Sodium Total ICAP	71	mg/L	1.0	1

SM 5310C - Total Organic Carbon

	05/29/21 02:12		1331117	(SM 5310C)	Total Organic Carbon	1.1	mg/L	0.20	1
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SM 5310C - Dissolved Organic Carbon

06/03/21	06/07/21 21:35	1332072	1332949	(SM 5310C)	Dissolved Organic Carbon	0.84 (B4,HA)	mg/L	0.20	1
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EPA 200.8 - Uranium by ICPMS as pCi/L

	05/27/21 14:28			(EPA 200.8)	Uranium by ICPMS as pCi/L	3.4 (c)	pCi/L	0.70	1
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SM 2340B - Total Hardness as CaCO3 by ICP

	06/01/21 15:27			(SM 2340B)	Total Hardness as CaCO3 by ICP (calc)	360 (c)	mg/L	3.0	1
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EPA 218.6 - Hexavalent chromium(Dissolved)

	05/30/21 15:51		1330419	(EPA 218.6)	Hexavalent chromium(Dissolved)	0.74	ug/L	0.020	1
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EPA 300.0 - Nitrate, Nitrite by EPA 300.0

	05/21/21 04:33		1329392	(EPA 300.0)	Nitrate as Nitrogen by IC	3.0	mg/L	0.50	5
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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
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 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
	05/21/21 04:33		1329392	(EPA 300.0)	Nitrate as NO3 (calc)	13	mg/L	2.2	5
	05/21/21 04:33		1329392	(EPA 300.0)	Nitrite Nitrogen by IC	ND	mg/L	0.25	5
	05/21/21 04:33		1329392	(EPA 300.0)	Total Nitrate, Nitrite-N, CALC	3.0	mg/L	0.10	1
EPA 300.0 - Chloride, Sulfate by EPA 300.0									
	05/21/21 04:33		1329393	(EPA 300.0)	Chloride	100	mg/L	2.5	5
	05/21/21 04:33		1329393	(EPA 300.0)	Sulfate	160	mg/L	2.5	5
EPA 314.0 - Perchlorate with 2 ug/L MRL									
	05/26/21 22:19	(1)	1330530	(EPA 314.0)	Perchlorate- Low Level	ND	ug/L	2.0	1
EPA 537.1 - EPA Method 537.1									
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	11-chloroeicosafluoro-3-oxaundecane-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorobutanesulfonic acid (PFBS)	0.0069	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorodecanoic acid (PFDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorododecanoic acid (PFDoA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluoroheptanoic acid (PFHpA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorohexanesulfonic acid (PFHxS)	0.0061	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorohexanoic acid (PFHxA)	0.0042	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorononanoic acid (PFNA)	0.0029	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorooctanesulfonic acid (PFOS)	0.030	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorooctanoic acid (PFOA)	0.012	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorotetradecanoic acid (PFTA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluorotridecanoic acid (PFTrDA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	Perfluoroundecanoic acid (PFUnA)	ND	ug/L	0.0020	1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	13C2-PFDA	100	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	13C2-PFHxA	112	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	13C2-PFOA- IS#1	104	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	13C3-HFPO-DA	101	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	13C4-PFOS- IS#2	98	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	d3-NMeFOSAA	94	%		1
05/21/21	05/24/21 20:32	1329480	1330214	(EPA 537.1)	d5-NetFOSAA	108	%		1

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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District
 Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
EPA 1664 - Oil and Grease by 1664(subbed)									
	05/26/21 09:19			(EPA 1664)	Oil and Grease by 1664(subbed)	ND	mg/L	1	1
EPA 524.2 - Volatile Organics by GCMS									
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Chloroform (Trichloromethane)	0.81	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1

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Samples Received on:
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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Dibromomethane	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Dichlorodifluoromethane	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Dichloromethane	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Di-isopropyl ether	ND	ug/L	3.0	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Ethyl benzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Hexachlorobutadiene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Isopropylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) m,p-Xylenes	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Naphthalene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) n-Butylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) n-Propylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) o-Chlorotoluene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) o-Xylene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) p-Chlorotoluene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) p-Isopropyltoluene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) sec-Butylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Styrene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) tert-amyl Methyl Ether	ND	ug/L	3.0	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) tert-Butylbenzene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Toluene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Total 1,3-Dichloropropene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Total THM	0.81	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Total xylenes	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) trans-1,3-Dichloropropene	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Trichloroethylene (TCE)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Trichlorofluoromethane	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) Vinyl chloride (VC)	ND	ug/L	0.30	1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) 1,2-Dichloroethane-d4	118	%		1
05/27/21	05/28/21	1:59	1331034	1331037	(EPA 524.2) 4-Bromofluorobenzene	98	%		1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Report: 936465
Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

Joseph Liles
 4040 Paramount Blvd.
 Lakewood, CA 90712

Samples Received on:
 05/20/2021 1400

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
05/27/21	05/28/21 1:59	1331034	1331037	(EPA 524.2)	Toluene-d8	83	%		1
SM 2320B - Alkalinity in CaCO3 units									
	05/26/21 23:44		1330508	(SM 2320B)	Alkalinity in CaCO3 units	200	mg/L	2.0	1
E160.1/SM2540C - Total Dissolved Solids (TDS)									
05/26/21	05/26/21 22:31	1330586	1330591	(E160.1/SM2540C)	Total Dissolved Solids (TDS)	650	mg/L	10	1
SM 2540D - Total Suspended Solids (TSS)									
	05/26/21 21:11		1330631	(SM 2540D)	Total Suspended Solids (TSS)	ND	mg/L	10	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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Water Replenishment District

Nitrate, Nitrite by EPA 300.0

Analytical Batch: 1329392

202105200592 LH-INF-20210520

Analysis Date: 05/21/2021

Analyzed by: HL7J

Chloride, Sulfate by EPA 300.0

Analytical Batch: 1329393

202105200592 LH-INF-20210520

Analysis Date: 05/21/2021

Analyzed by: HL7J

EPA Method 537.1

Prep Batch: 1329480 Analytical Batch: 1330214

202105200575 GAC-1-20210520

202105200576 GAC-2-20210520

202105200577 GAC-3-20210520

202105200578 GAC-4-20210520

202105200579 IX-1-20210520

202105200580 IX-2-20210520

202105200581 IX-3-20210520

202105200582 IX-4-20210520

202105200583 GAC-1M-20210520

202105200584 GAC-2M-20210520

202105200585 GAC-3M-20210520

202105200586 GAC-4M-20210520

202105200587 IX-1M-20210520

202105200588 IX-2M-20210520

202105200589 IX-3M-20210520

202105200590 IX-4M-20210520

202105200592 LH-INF-20210520

Analysis Date: 05/24/2021

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

Analyzed by: KAM

ICPMS Metals

Prep Batch: 1329489 Analytical Batch: 1330338

202105200592 LH-INF-20210520

Analysis Date: 05/26/2021

Analyzed by: AZS

Hexavalent chromium(Dissolved)

Analytical Batch: 1330419

202105200592 LH-INF-20210520

Analysis Date: 05/30/2021

Analyzed by: LMR

Alkalinity in CaCO3 units

Analytical Batch: 1330508

202105200592 LH-INF-20210520

Analysis Date: 05/26/2021

Analyzed by: P6LW

Perchlorate with 2 ug/L MRL

Analytical Batch: 1330530

202105200592 LH-INF-20210520

Analysis Date: 05/26/2021

Analyzed by: H5VG

Total Dissolved Solids (TDS)

Prep Batch: 1330586 Analytical Batch: 1330591

202105200592 LH-INF-20210520

Analysis Date: 05/26/2021

Analyzed by: JRF

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Project: 0250000
Group: WRD Pilot [Set #1]

Water Replenishment District

Total Suspended Solids (TSS)**Analytical Batch: 1330631**

202105200592 LH-INF-20210520

Analysis Date: 05/26/2021

Analyzed by: JRF

Volatile Organics by GCMS**Prep Batch: 1331034 Analytical Batch: 1331037**

202105200592 LH-INF-20210520

Analysis Date: 05/28/2021

Analyzed by: TR7W

Total Organic Carbon**Analytical Batch: 1331117**

202105200592 LH-INF-20210520

Analysis Date: 05/29/2021

Analyzed by: TLL7

ICP Metals**Prep Batch: 1329489 Analytical Batch: 1331521**

202105200592 LH-INF-20210520

Analysis Date: 06/01/2021

Analyzed by: NINA

Dissolved Organic Carbon**Prep Batch: 1332072 Analytical Batch: 1332949**

202105200592 LH-INF-20210520

Analysis Date: 06/07/2021

Analyzed by: TLL7

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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
Nitrate, Nitrite by EPA 300.0 by EPA 300.0									
Analytical Batch: 1329392					Analysis Date: 05/21/2021				
LCS1	Nitrate as Nitrogen by IC		2.5	2.47	mg/L	99	(90-110)		
LCS2	Nitrate as Nitrogen by IC		2.5	2.46	mg/L	98	(90-110)	20	0.41
MBLK	Nitrate as Nitrogen by IC			<0.0042	mg/L				
MRL_CHK	Nitrate as Nitrogen by IC		0.05	0.0475	mg/L	95	(50-150)		
MS_202105200592	Nitrate as Nitrogen by IC	3.0	1.3	9.54	mg/L	104	(80-120)		
MSD_202105200592	Nitrate as Nitrogen by IC	3.0	1.3	9.60	mg/L	105	(80-120)	20	0.57
LCS1	Nitrite Nitrogen by IC		1	0.963	mg/L	96	(90-110)		
LCS2	Nitrite Nitrogen by IC		1	0.959	mg/L	96	(90-110)	20	0.42
MBLK	Nitrite Nitrogen by IC			<0.0050	mg/L				
MRL_CHK	Nitrite Nitrogen by IC		0.05	0.0439	mg/L	88	(50-150)		
MS_202105200592	Nitrite Nitrogen by IC	ND	0.5	2.40	mg/L	96	(80-120)		
MSD_202105200592	Nitrite Nitrogen by IC	ND	0.5	2.42	mg/L	97	(80-120)	20	0.96
Chloride, Sulfate by EPA 300.0 by EPA 300.0									
Analytical Batch: 1329393					Analysis Date: 05/21/2021				
LCS1	Chloride		25	25.5	mg/L	102	(90-110)		
LCS2	Chloride		25	25.4	mg/L	101	(90-110)	20	0.39
MBLK	Chloride			<0.1397	mg/L				
MRL_CHK	Chloride		0.5	0.431	mg/L	86	(50-150)		
MS_202105200592	Chloride	100	13	171	mg/L	106	(80-120)		
MSD_202105200592	Chloride	100	13	172	mg/L	107	(80-120)	20	0.30
LCS1	Sulfate		50	51.1	mg/L	102	(90-110)		
LCS2	Sulfate		50	50.9	mg/L	102	(90-110)	20	0.39
MBLK	Sulfate			<0.0614	mg/L				
MRL_CHK	Sulfate		1	0.935	mg/L	94	(50-150)		
MRLLW	Sulfate		0.25	0.235	mg/L	94	(50-150)		
MS_202105200592	Sulfate	160	25	299	mg/L	108	(80-120)		
MSD_202105200592	Sulfate	160	25	300	mg/L	109	(80-120)	20	0.37
EPA Method 537.1 by EPA 537.1									
Prep Batch: 1329480 Analytical Batch: 1330214					Analysis Date: 05/24/2021				
LCS1	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0233	ug/L	99	(70-130)		
LCS2	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.024	0.0234	ug/L	99	(70-130)	30	0.43
MBLK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid			<0.000667	ug/L				
MRL_CHK	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid		0.0019	0.00185	ug/L	98	(50-150)		
MS_202105190093	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00193	ug/L	103	(50-150)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
 (I) - Indicates internal standard compound.

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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD_202105190093	11-chloroeicosafuoro-3-oxaundecane-sulfonic acid	ND	0.0019	0.00202	ug/L	107	(50-150)	50	4.6
LCS1	13C2-PFDA (S)		100	102	%	103	(70-130)		
LCS2	13C2-PFDA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFDA (S)			99.0	%	99	(70-130)		
MRL_CHK	13C2-PFDA (S)		100	102	%	103	(70-130)		
MS_202105190093	13C2-PFDA (S)		100	104	%	104	(70-130)		
MSD_202105190093	13C2-PFDA (S)		100	98.6	%	99	(70-130)		
LCS1	13C2-PFHxA (S)		100	107	%	107	(70-130)		
LCS2	13C2-PFHxA (S)		100	107	%	107	(70-130)		
MBLK	13C2-PFHxA (S)			96.4	%	96	(70-130)		
MRL_CHK	13C2-PFHxA (S)		100	104	%	104	(70-130)		
MS_202105190093	13C2-PFHxA (S)		100	112	%	112	(70-130)		
MSD_202105190093	13C2-PFHxA (S)		100	105	%	105	(70-130)		
LCS1	13C2-PFOA- IS#1 (I)		100	97.9	%	98	(50-150)		
LCS2	13C2-PFOA- IS#1 (I)		100	100	%	101	(50-150)		
MBLK	13C2-PFOA- IS#1 (I)			103	%	103	(50-150)		
MRL_CHK	13C2-PFOA- IS#1 (I)		100	100	%	100	(50-150)		
MS_202105190093	13C2-PFOA- IS#1 (I)		100	104	%	105	(50-150)		
MSD_202105190093	13C2-PFOA- IS#1 (I)		100	106	%	106	(50-150)		
LCS1	13C3-HFPO-DA (S)		100	99.0	%	99	(70-130)		
LCS2	13C3-HFPO-DA (S)		100	98.5	%	98	(70-130)		
MBLK	13C3-HFPO-DA (S)			91.3	%	91	(70-130)		
MRL_CHK	13C3-HFPO-DA (S)		100	95.3	%	95	(70-130)		
MS_202105190093	13C3-HFPO-DA (S)		100	97.9	%	98	(70-130)		
MSD_202105190093	13C3-HFPO-DA (S)		100	95.0	%	95	(70-130)		
LCS1	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
LCS2	13C4-PFOS- IS#2 (I)		100	99.0	%	99	(50-150)		
MBLK	13C4-PFOS- IS#2 (I)			101	%	101	(50-150)		
MRL_CHK	13C4-PFOS- IS#2 (I)		100	96.8	%	97	(50-150)		
MS_202105190093	13C4-PFOS- IS#2 (I)		100	100	%	100	(50-150)		
MSD_202105190093	13C4-PFOS- IS#2 (I)		100	97.4	%	97	(50-150)		
LCS1	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0272	ug/L	115	(70-130)		
LCS2	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.024	0.0259	ug/L	110	(70-130)	30	4.9
MBLK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)			<0.000667	ug/L				
MRL_CHK	4,8-dioxa-3H-perfluorononanoic acid (ADONA)		0.0019	0.00216	ug/L	114	(50-150)		
MS_202105190093	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00219	ug/L	116	(50-150)		
MSD_202105190093	4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.0019	0.00205	ug/L	108	(50-150)	50	6.5
LCS1	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0240	ug/L	103	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.023	0.0240	ug/L	103	(70-130)	30	0.0
MBLK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid			<0.000667	ug/L				
MRL_CHK	9-chlorohexadecafluoro-3-oxanone-sulfonic acid		0.0019	0.00198	ug/L	107	(50-150)		
MS_202105190093	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00190	ug/L	102	(50-150)		
MSD_202105190093	9-chlorohexadecafluoro-3-oxanone-sulfonic acid	ND	0.0019	0.00199	ug/L	107	(50-150)	50	4.6
LCS1	d3-NMeFOSAA (I)		100	87.9	%	88	(50-150)		
LCS2	d3-NMeFOSAA (I)		100	86.2	%	86	(50-150)		
MBLK	d3-NMeFOSAA (I)			87.0	%	87	(50-150)		
MRL_CHK	d3-NMeFOSAA (I)		100	88.8	%	89	(50-150)		
MS_202105190093	d3-NMeFOSAA (I)		100	94.5	%	94	(50-150)		
MSD_202105190093	d3-NMeFOSAA (I)		100	91.1	%	91	(50-150)		
LCS1	d5-NEtFOSAA (S)		100	104	%	104	(70-130)		
LCS2	d5-NEtFOSAA (S)		100	110	%	110	(70-130)		
MBLK	d5-NEtFOSAA (S)			104	%	104	(70-130)		
MRL_CHK	d5-NEtFOSAA (S)		100	106	%	107	(70-130)		
MS_202105190093	d5-NEtFOSAA (S)		100	103	%	103	(70-130)		
MSD_202105190093	d5-NEtFOSAA (S)		100	106	%	106	(70-130)		
LCS1	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.025	0.0245	ug/L	98	(70-130)	30	2.0
MBLK	Hexafluoropropylene oxide dimer acid (HFPO-DA)			<0.000667	ug/L				
MRL_CHK	Hexafluoropropylene oxide dimer acid (HFPO-DA)		0.002	0.00196	ug/L	98	(50-150)		
MS_202105190093	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00196	ug/L	98	(50-150)		
MSD_202105190093	Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.002	0.00190	ug/L	95	(50-150)	50	3.0
LCS1	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0277	ug/L	111	(70-130)		
LCS2	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0282	ug/L	113	(70-130)	30	1.8
MBLK	N-ethyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-ethyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00216	ug/L	108	(50-150)		
MS_202105190093	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00208	ug/L	104	(50-150)		
MSD_202105190093	N-ethyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00219	ug/L	110	(50-150)	50	5.3
LCS1	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0262	ug/L	105	(70-130)		
LCS2	N-methyl Perfluorooctanesulfonamidoacetic acid		0.025	0.0266	ug/L	106	(70-130)	30	1.5
MBLK	N-methyl Perfluorooctanesulfonamidoacetic acid			<0.000667	ug/L				
MRL_CHK	N-methyl Perfluorooctanesulfonamidoacetic acid		0.002	0.00202	ug/L	101	(50-150)		
MS_202105190093	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00213	ug/L	107	(50-150)		
MSD_202105190093	N-methyl Perfluorooctanesulfonamidoacetic acid	ND	0.002	0.00205	ug/L	103	(50-150)	50	3.9
LCS1	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0201	ug/L	91	(70-130)		
LCS2	Perfluorobutanesulfonic acid (PFBS)		0.022	0.0200	ug/L	90	(70-130)	30	0.50
MBLK	Perfluorobutanesulfonic acid (PFBS)			<0.000667	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 936465
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Perfluorobutanesulfonic acid (PFBS)		0.0018	0.00161	ug/L	91	(50-150)		
MS_202105190093	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00182	ug/L	103	(50-150)		
MSD_202105190093	Perfluorobutanesulfonic acid (PFBS)	ND	0.0018	0.00176	ug/L	99	(50-150)	50	3.1
LCS1	Perfluorodecanoic acid (PFDA)		0.025	0.0262	ug/L	105	(70-130)		
LCS2	Perfluorodecanoic acid (PFDA)		0.025	0.0243	ug/L	97	(70-130)	30	7.5
MBLK	Perfluorodecanoic acid (PFDA)			<0.000667	ug/L				
MRL_CHK	Perfluorodecanoic acid (PFDA)		0.002	0.00197	ug/L	99	(50-150)		
MS_202105190093	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00202	ug/L	101	(50-150)		
MSD_202105190093	Perfluorodecanoic acid (PFDA)	ND	0.002	0.00206	ug/L	103	(50-150)	50	1.7
LCS1	Perfluorododecanoic acid (PFDoA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluorododecanoic acid (PFDoA)		0.025	0.0257	ug/L	103	(70-130)	30	6.0
MBLK	Perfluorododecanoic acid (PFDoA)			<0.000667	ug/L				
MRL_CHK	Perfluorododecanoic acid (PFDoA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202105190093	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00209	ug/L	105	(50-150)		
MSD_202105190093	Perfluorododecanoic acid (PFDoA)	ND	0.002	0.00204	ug/L	102	(50-150)	50	2.6
LCS1	Perfluoroheptanoic acid (PFHpA)		0.025	0.0294	ug/L	118	(70-130)		
LCS2	Perfluoroheptanoic acid (PFHpA)		0.025	0.0283	ug/L	113	(70-130)	30	3.8
MBLK	Perfluoroheptanoic acid (PFHpA)			<0.000667	ug/L				
MRL_CHK	Perfluoroheptanoic acid (PFHpA)		0.002	0.00229	ug/L	115	(50-150)		
MS_202105190093	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00232	ug/L	116	(50-150)		
MSD_202105190093	Perfluoroheptanoic acid (PFHpA)	ND	0.002	0.00226	ug/L	113	(50-150)	50	2.5
LCS1	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0255	ug/L	112	(70-130)		
LCS2	Perfluorohexanesulfonic acid (PFHxS)		0.023	0.0253	ug/L	111	(70-130)	30	0.79
MBLK	Perfluorohexanesulfonic acid (PFHxS)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanesulfonic acid (PFHxS)		0.0018	0.00202	ug/L	111	(50-150)		
MS_202105190093	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00205	ug/L	112	(50-150)		
MSD_202105190093	Perfluorohexanesulfonic acid (PFHxS)	ND	0.0018	0.00205	ug/L	112	(50-150)	50	0.0088
LCS1	Perfluorohexanoic acid (PFHxA)		0.025	0.0271	ug/L	108	(70-130)		
LCS2	Perfluorohexanoic acid (PFHxA)		0.025	0.0269	ug/L	108	(70-130)	30	0.74
MBLK	Perfluorohexanoic acid (PFHxA)			<0.000667	ug/L				
MRL_CHK	Perfluorohexanoic acid (PFHxA)		0.002	0.00212	ug/L	106	(50-150)		
MS_202105190093	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00222	ug/L	106	(50-150)		
MSD_202105190093	Perfluorohexanoic acid (PFHxA)	ND	0.002	0.00214	ug/L	102	(50-150)	50	3.7
LCS1	Perfluorononanoic acid (PFNA)		0.025	0.0273	ug/L	109	(70-130)		
LCS2	Perfluorononanoic acid (PFNA)		0.025	0.0265	ug/L	106	(70-130)	30	3.0
MBLK	Perfluorononanoic acid (PFNA)			<0.000667	ug/L				
MRL_CHK	Perfluorononanoic acid (PFNA)		0.002	0.00226	ug/L	113	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202105190093	Perfluorononanoic acid (PFNA)	ND	0.002	0.00218	ug/L	109	(50-150)		
MSD_202105190093	Perfluorononanoic acid (PFNA)	ND	0.002	0.00214	ug/L	107	(50-150)	50	1.7
LCS1	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0256	ug/L	111	(70-130)		
LCS2	Perfluorooctanesulfonic acid (PFOS)		0.023	0.0258	ug/L	112	(70-130)	30	0.78
MBLK	Perfluorooctanesulfonic acid (PFOS)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanesulfonic acid (PFOS)		0.0019	0.00212	ug/L	115	(50-150)		
MS_202105190093	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00203	ug/L	110	(50-150)		
MSD_202105190093	Perfluorooctanesulfonic acid (PFOS)	ND	0.0019	0.00216	ug/L	117	(50-150)	50	6.1
LCS1	Perfluorooctanoic acid (PFOA)		0.025	0.0284	ug/L	114	(70-130)		
LCS2	Perfluorooctanoic acid (PFOA)		0.025	0.0270	ug/L	108	(70-130)	30	5.0
MBLK	Perfluorooctanoic acid (PFOA)			<0.000667	ug/L				
MRL_CHK	Perfluorooctanoic acid (PFOA)		0.002	0.00231	ug/L	116	(50-150)		
MS_202105190093	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00228	ug/L	109	(50-150)		
MSD_202105190093	Perfluorooctanoic acid (PFOA)	ND	0.002	0.00220	ug/L	105	(50-150)	50	3.4
LCS1	Perfluorotetradecanoic acid (PFTA)		0.025	0.0266	ug/L	106	(70-130)		
LCS2	Perfluorotetradecanoic acid (PFTA)		0.025	0.0254	ug/L	102	(70-130)	30	4.6
MBLK	Perfluorotetradecanoic acid (PFTA)			<0.000667	ug/L				
MRL_CHK	Perfluorotetradecanoic acid (PFTA)		0.002	0.00213	ug/L	106	(50-150)		
MS_202105190093	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00223	ug/L	107	(50-150)		
MSD_202105190093	Perfluorotetradecanoic acid (PFTA)	ND	0.002	0.00229	ug/L	110	(50-150)	50	2.6
LCS1	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0250	ug/L	100	(70-130)		
LCS2	Perfluorotridecanoic acid (PFTrDA)		0.025	0.0246	ug/L	98	(70-130)	30	1.6
MBLK	Perfluorotridecanoic acid (PFTrDA)			<0.000667	ug/L				
MRL_CHK	Perfluorotridecanoic acid (PFTrDA)		0.002	0.00198	ug/L	99	(50-150)		
MS_202105190093	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00195	ug/L	98	(50-150)		
MSD_202105190093	Perfluorotridecanoic acid (PFTrDA)	ND	0.002	0.00195	ug/L	97	(50-150)	50	0.092
LCS1	Perfluoroundecanoic acid (PFUnA)		0.025	0.0255	ug/L	102	(70-130)		
LCS2	Perfluoroundecanoic acid (PFUnA)		0.025	0.0255	ug/L	102	(70-130)	30	0.0
MBLK	Perfluoroundecanoic acid (PFUnA)			<0.000667	ug/L				
MRL_CHK	Perfluoroundecanoic acid (PFUnA)		0.002	0.00195	ug/L	97	(50-150)		
MS_202105190093	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00198	ug/L	99	(50-150)		
MSD_202105190093	Perfluoroundecanoic acid (PFUnA)	ND	0.002	0.00197	ug/L	98	(50-150)	50	0.60

ICPMS Metals by EPA 200.8

Analytical Batch: 1330338

Analysis Date: 05/26/2021

LCS1	Arsenic Total ICAP/MS	50	49.7	ug/L	99	(85-115)		
LCS2	Arsenic Total ICAP/MS	50	50.4	ug/L	101	(85-115)	20	1.4
MBLK	Arsenic Total ICAP/MS			<0.4134	ug/L			

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 936465
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Arsenic Total ICAP/MS		1	1.06	ug/L	106	(50-150)		
MS_202105200336	Arsenic Total ICAP/MS	9.7	50	59.1	ug/L	99	(70-130)		
MS2_202105200681	Arsenic Total ICAP/MS	ND	50	47.2	ug/L	95	(70-130)		
MSD_202105200336	Arsenic Total ICAP/MS	9.7	50	60.8	ug/L	102	(70-130)	20	2.8
MSD2_202105200681	Arsenic Total ICAP/MS	ND	50	49.8	ug/L	100	(70-130)	20	5.3
LCS1	Manganese Total ICAP/MS		100	103	ug/L	103	(85-115)		
LCS2	Manganese Total ICAP/MS		100	104	ug/L	104	(85-115)	20	0.97
MBLK	Manganese Total ICAP/MS			<0.4606	ug/L				
MRL_CHK	Manganese Total ICAP/MS		2	2.05	ug/L	103	(50-150)		
MS_202105200336	Manganese Total ICAP/MS	ND	100	97.5	ug/L	97	(70-130)		
MS2_202105200681	Manganese Total ICAP/MS	ND	100	96.1	ug/L	96	(70-130)		
MSD_202105200336	Manganese Total ICAP/MS	ND	100	103	ug/L	103	(70-130)	20	5.5
MSD2_202105200681	Manganese Total ICAP/MS	ND	100	99.6	ug/L	100	(70-130)	20	3.6
LCS1	Uranium ICAP/MS		50	52.4	ug/L	105	(85-115)		
LCS2	Uranium ICAP/MS		50	53.2	ug/L	106	(85-115)	20	1.5
MBLK	Uranium ICAP/MS			<0.0872	ug/L				
MRL_CHK	Uranium ICAP/MS		1	0.997	ug/L	100	(50-150)		
MS_202105200336	Uranium ICAP/MS	2.6	50	57.7	ug/L	110	(70-130)		
MS2_202105200681	Uranium ICAP/MS	ND	50	51.9	ug/L	104	(70-130)		
MSD_202105200336	Uranium ICAP/MS	2.6	50	59.7	ug/L	114	(70-130)	20	3.5
MSD2_202105200681	Uranium ICAP/MS	ND	50	54.1	ug/L	108	(70-130)	20	4.1

Hexavalent chromium(Dissolved) by EPA 218.6

Analytical Batch: 1330419

Analysis Date: 05/30/2021

LCS1	Hexavalent chromium(Dissolved)		2	1.96	ug/L	98	(90-110)		
LCS2	Hexavalent chromium(Dissolved)		2	1.95	ug/L	97	(90-110)		
MBLK	Hexavalent chromium(Dissolved)			<0.01	ug/L				
MRL_CHK	Hexavalent chromium(Dissolved)		0.02	0.0117	ug/L	59	(50-150)		
MS_202105200592	Hexavalent chromium(Dissolved)	0.74	2	2.80	ug/L	103	(90-110)		
MS_202105210635	Hexavalent chromium(Dissolved)	3.6	2	5.62	ug/L	101	(90-110)		
MSD_202105200592	Hexavalent chromium(Dissolved)	0.74	2	2.82	ug/L	104	(90-110)	20	0.82
MSD_202105210635	Hexavalent chromium(Dissolved)	3.6	2	5.67	ug/L	103	(90-110)	20	0.78

Alkalinity in CaCO3 units by SM 2320B

Analytical Batch: 1330508

Analysis Date: 05/26/2021

LCS1	Alkalinity in CaCO3 units		100	102	mg/L	102	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	102	mg/L	102	(90-110)	20	0.0
MBLK	Alkalinity in CaCO3 units			<1	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2	2.30	mg/L	115	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MS_202105190227	Alkalinity in CaCO3 units	78	100	185	mg/L	107	(80-120)		
MS_202105190406	Alkalinity in CaCO3 units	200	100	305	mg/L	104	(80-120)		
MSD_202105190227	Alkalinity in CaCO3 units	78	100	186	mg/L	108	(80-120)	20	0.58
MSD_202105190406	Alkalinity in CaCO3 units	200	100	305	mg/L	104	(80-120)	20	0.11

Perchlorate with 2 ug/L MRL by EPA 314.0

Analytical Batch: 1330530

Analysis Date: 05/26/2021

LCS1	Perchlorate- Low Level		10	10.1	ug/L	101	(85-115)		
LCS2	Perchlorate- Low Level		10	10.1	ug/L	101	(85-115)	15	0.0
MBLK	Perchlorate- Low Level			<1	ug/L				
MRL_CHK	Perchlorate- Low Level		2	1.92	ug/L	96	(75-125)		
MS2_202105200397	Perchlorate- Low Level	ND	10	9.12	ug/L	91	(80-120)		
MSD2_202105200397	Perchlorate- Low Level	ND	10	10.3	ug/L	103	(80-120)	15	12

Total Dissolved Solids (TDS) by E160.1/SM2540C

Analytical Batch: 1330591

Analysis Date: 05/26/2021

DUP_202103260300	Total Dissolved Solid (TDS)	300		302	mg/L		(0-10)	10	0.66
DUP_202105200537	Total Dissolved Solid (TDS)	550		552	mg/L		(0-10)	10	1.1
LCS1	Total Dissolved Solid (TDS)		175	188	mg/L	107	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	704	mg/L	101	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<5	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	13.0	mg/L	130	(50-150)		

Total Suspended Solids (TSS) by SM 2540D

Analytical Batch: 1330631

Analysis Date: 05/26/2021

DUP_202104140066	Total Suspended Solids (TSS)	96		92.0	mg/L		(0-10)	10	4.3
DUP_202104140087	Total Suspended Solids (TSS)			300	mg/L		(0-10)	10	<u>25</u>
LCS1	Total Suspended Solids (TSS)		175	156	mg/L	89	(71-107)		
LCS2	Total Suspended Solids (TSS)		175	170	mg/L	97	(71-107)	20	8.6
MBLK	Total Suspended Solids (TSS)			<10	mg/L				
MRL_CHK	Total Suspended Solids (TSS)		10	13.0	mg/L	130	(50-150)		

Volatile Organics by GCMS by EPA 524.2

Analytical Batch: 1331037

Analysis Date: 05/27/2021

LCS1	1,1,1,2-Tetrachloroethane		5	4.56	ug/L	91	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	4.88	ug/L	98	(70-130)	20	6.8
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.66	ug/L	93	(70-130)		

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 936465
 Project: 0250000
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	1,1,1-Trichloroethane		5	4.95	ug/L	99	(70-130)	20	6.0
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	4.71	ug/L	94	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	4.84	ug/L	97	(70-130)	20	2.7
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.56	ug/L	91	(70-130)		
LCS2	1,1,2-Trichloroethane		5	4.90	ug/L	98	(70-130)	20	7.2
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.560	ug/L	112	(50-150)		
LCS1	1,1-Dichloroethane		5	4.75	ug/L	95	(70-130)		
LCS2	1,1-Dichloroethane		5	5.05	ug/L	101	(70-130)	20	6.1
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	1,1-Dichloroethylene		5	4.80	ug/L	96	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.03	ug/L	101	(70-130)	20	4.7
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.630	ug/L	126	(50-150)		
LCS1	1,1-Dichloropropene		5	4.53	ug/L	91	(70-130)		
LCS2	1,1-Dichloropropene		5	4.78	ug/L	96	(70-130)	20	5.4
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.80	ug/L	96	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	5.16	ug/L	103	(70-130)	20	7.2
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.620	ug/L	124	(50-150)		
LCS1	1,2,3-Trichloropropane		5	4.63	ug/L	93	(70-130)		
LCS2	1,2,3-Trichloropropane		5	4.68	ug/L	94	(70-130)	20	1.1
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.570	ug/L	114	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.30	ug/L	86	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	4.74	ug/L	95	(70-130)	20	9.7
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.600	ug/L	120	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	5.29	ug/L	106	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	5.42	ug/L	108	(70-130)	20	2.4
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				

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 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 936465
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	1,2-Dichloroethane		5	4.57	ug/L	91	(70-130)		
LCS2	1,2-Dichloroethane		5	4.65	ug/L	93	(70-130)	20	1.7
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	96.0	%	96	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	98.6	%	99	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			112	%	112	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	102	%	102	(70-130)		
MRLLW	1,2-Dichloroethane-d4 (S)		5	97.8	%	98	(70-130)		
LCS1	1,2-Dichloropropane		5	4.66	ug/L	93	(70-130)		
LCS2	1,2-Dichloropropane		5	4.85	ug/L	97	(70-130)	20	4.0
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	5.21	ug/L	104	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	5.33	ug/L	107	(70-130)	20	2.3
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.440	ug/L	88	(50-150)		
LCS1	1,3-Dichloropropane		5	4.45	ug/L	89	(70-130)		
LCS2	1,3-Dichloropropane		5	4.83	ug/L	97	(70-130)	20	8.2
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.530	ug/L	106	(50-150)		
LCS1	2,2-Dichloropropane		5	4.01	ug/L	80	(70-130)		
LCS2	2,2-Dichloropropane		5	3.81	ug/L	76	(70-130)	20	5.1
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.510	ug/L	102	(50-150)		
LCS1	2-Butanone (MEK)		50	42.8	ug/L	86	(70-130)		
LCS2	2-Butanone (MEK)		50	45.3	ug/L	91	(70-130)	20	5.7
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.66	ug/L	113	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	105	%	105	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	100	%	100	(70-130)		
MBLK	4-Bromofluorobenzene (S)			99.6	%	100	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	98.8	%	99	(70-130)		
MRLLW	4-Bromofluorobenzene (S)		5	99.8	%	100	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	47.6	ug/L	95	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	50.6	ug/L	101	(70-130)	20	6.1
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.89	ug/L	98	(50-150)		
LCS1	Benzene		5	4.74	ug/L	95	(70-130)		
LCS2	Benzene		5	4.98	ug/L	100	(70-130)	20	4.9
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	Bromobenzene		5	4.71	ug/L	94	(70-130)		
LCS2	Bromobenzene		5	4.84	ug/L	97	(70-130)	20	2.7
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromochloromethane		5	4.52	ug/L	90	(70-130)		
LCS2	Bromochloromethane		5	4.64	ug/L	93	(70-130)	20	2.6
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromodichloromethane		5	4.46	ug/L	89	(70-130)		
LCS2	Bromodichloromethane		5	4.59	ug/L	92	(70-130)	20	2.9
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Bromoethane		5	4.53	ug/L	91	(70-130)		
LCS2	Bromoethane		5	4.81	ug/L	96	(70-130)	20	6.0
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.630	ug/L	126	(50-150)		
LCS1	Bromoform		5	4.97	ug/L	99	(70-130)		
LCS2	Bromoform		5	4.81	ug/L	96	(70-130)	20	3.3
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.570	ug/L	114	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	4.79	ug/L	96	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.09	ug/L	102	(70-130)	20	6.1
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.600	ug/L	120	(50-150)		
LCS1	Carbon disulfide		5	4.58	ug/L	92	(70-130)		
LCS2	Carbon disulfide		5	4.78	ug/L	96	(70-130)	20	4.3
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.550	ug/L	110	(50-150)		
LCS1	Carbon Tetrachloride		5	4.61	ug/L	92	(70-130)		
LCS2	Carbon Tetrachloride		5	4.85	ug/L	97	(70-130)	20	5.1
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.540	ug/L	108	(50-150)		
LCS1	Chlorobenzene		5	4.68	ug/L	94	(70-130)		

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Chlorobenzene		5	5.03	ug/L	101	(70-130)	20	7.2
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.530	ug/L	106	(50-150)		
LCS1	Chlorodibromomethane		5	4.55	ug/L	91	(70-130)		
LCS2	Chlorodibromomethane		5	4.89	ug/L	98	(70-130)	20	7.2
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Chloroethane		5	4.84	ug/L	97	(70-130)		
LCS2	Chloroethane		5	4.88	ug/L	98	(70-130)	20	0.82
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.590	ug/L	118	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.67	ug/L	93	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.90	ug/L	98	(70-130)	20	4.8
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.570	ug/L	114	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	4.54	ug/L	91	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	4.64	ug/L	93	(70-130)	20	2.2
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.630	ug/L	126	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.52	ug/L	90	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.71	ug/L	94	(70-130)	20	4.1
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.530	ug/L	106	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.31	ug/L	86	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.49	ug/L	90	(70-130)	20	4.1
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.470	ug/L	94	(50-150)		
LCS1	Dibromomethane		5	4.57	ug/L	91	(70-130)		
LCS2	Dibromomethane		5	4.80	ug/L	96	(70-130)	20	4.9
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Dichlorodifluoromethane		5	4.93	ug/L	99	(70-130)		
LCS2	Dichlorodifluoromethane		5	5.18	ug/L	104	(70-130)	20	5.0
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Dichloromethane		5	4.78	ug/L	96	(70-130)		
LCS2	Dichloromethane		5	4.99	ug/L	100	(70-130)	20	4.3
MBLK	Dichloromethane			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Dichloromethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Di-isopropyl ether		5	4.41	ug/L	88	(70-130)		
LCS2	Di-isopropyl ether		5	4.67	ug/L	93	(70-130)	20	5.7
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.570	ug/L	114	(50-150)		
LCS1	Ethyl benzene		5	4.80	ug/L	96	(70-130)		
LCS2	Ethyl benzene		5	5.25	ug/L	105	(70-130)	20	9.0
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Hexachlorobutadiene		5	4.70	ug/L	94	(70-130)		
LCS2	Hexachlorobutadiene		5	5.00	ug/L	100	(70-130)	20	6.2
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.720	ug/L	144	(50-150)		
LCS1	Isopropylbenzene		5	5.05	ug/L	101	(70-130)		
LCS2	Isopropylbenzene		5	5.25	ug/L	105	(70-130)	20	3.9
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	m,p-Xylenes		10	10.3	ug/L	103	(70-130)		
LCS2	m,p-Xylenes		10	11.1	ug/L	111	(70-130)	20	7.5
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.900	ug/L	90	(50-150)		
MRLLW	m,p-Xylenes		0.5	0.530	ug/L	106	(50-150)		
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.93	ug/L	99	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	5.06	ug/L	101	(70-130)	20	2.6
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.520	ug/L	104	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	4.61	ug/L	92	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	4.78	ug/L	96	(70-130)	20	3.6
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.590	ug/L	118	(50-150)		
LCS1	Naphthalene		5	4.27	ug/L	85	(70-130)		
LCS2	Naphthalene		5	4.58	ug/L	92	(70-130)	20	7.0
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.480	ug/L	96	(50-150)		
LCS1	n-Butylbenzene		5	4.73	ug/L	95	(70-130)		
LCS2	n-Butylbenzene		5	5.11	ug/L	102	(70-130)	20	7.7
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.520	ug/L	104	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 936465
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 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	n-Propylbenzene		5	4.97	ug/L	99	(70-130)		
LCS2	n-Propylbenzene		5	5.18	ug/L	104	(70-130)	20	4.1
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.490	ug/L	98	(50-150)		
LCS1	o-Chlorotoluene		5	4.95	ug/L	99	(70-130)		
LCS2	o-Chlorotoluene		5	5.14	ug/L	103	(70-130)	20	3.8
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.480	ug/L	96	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	4.81	ug/L	96	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.20	ug/L	104	(70-130)	20	7.8
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.600	ug/L	120	(50-150)		
LCS1	o-Xylene		5	4.85	ug/L	97	(70-130)		
LCS2	o-Xylene		5	5.15	ug/L	103	(70-130)	20	6.0
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.470	ug/L	94	(50-150)		
LCS1	p-Chlorotoluene		5	5.22	ug/L	104	(70-130)		
LCS2	p-Chlorotoluene		5	5.34	ug/L	107	(70-130)	20	2.3
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.500	ug/L	100	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.96	ug/L	99	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	5.07	ug/L	101	(70-130)	20	2.2
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.510	ug/L	102	(50-150)		
LCS1	p-Isopropyltoluene		5	5.38	ug/L	108	(70-130)		
LCS2	p-Isopropyltoluene		5	5.45	ug/L	109	(70-130)	20	1.3
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.440	ug/L	88	(50-150)		
LCS1	sec-Butylbenzene		5	5.53	ug/L	111	(70-130)		
LCS2	sec-Butylbenzene		5	5.63	ug/L	113	(70-130)	20	1.8
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	Styrene		5	5.05	ug/L	101	(70-130)		
LCS2	Styrene		5	5.42	ug/L	108	(70-130)	20	7.1
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.420	ug/L	84	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.26	ug/L	85	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.60	ug/L	92	(70-130)	20	7.7

Spike recovery is already corrected for native results.
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
 (S) - Indicates surrogate compound.
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Report: 936465
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Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.520	ug/L	104	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.56	ug/L	91	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	4.74	ug/L	95	(70-130)	20	3.9
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.580	ug/L	116	(50-150)		
LCS1	tert-Butylbenzene		5	5.01	ug/L	100	(70-130)		
LCS2	tert-Butylbenzene		5	5.14	ug/L	103	(70-130)	20	2.6
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	4.76	ug/L	95	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	5.08	ug/L	102	(70-130)	20	6.5
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.570	ug/L	114	(50-150)		
LCS1	Toluene		5	4.74	ug/L	95	(70-130)		
LCS2	Toluene		5	5.07	ug/L	101	(70-130)	20	6.7
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.540	ug/L	108	(50-150)		
LCS1	Toluene-d8 (S)		5	101	%	101	(70-130)		
LCS2	Toluene-d8 (S)		5	105	%	105	(70-130)		
MBLK	Toluene-d8 (S)			85.6	%	86	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	95.2	%	95	(70-130)		
MRLLW	Toluene-d8 (S)		5	93.0	%	93	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	4.77	ug/L	95	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.00	ug/L	100	(70-130)	20	4.7
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.600	ug/L	120	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.20	ug/L	84	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.57	ug/L	91	(70-130)	20	8.4
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Trichloroethylene (TCE)		5	4.71	ug/L	94	(70-130)		
LCS2	Trichloroethylene (TCE)		5	4.93	ug/L	99	(70-130)	20	4.6
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Trichlorofluoromethane		5	4.83	ug/L	97	(70-130)		
LCS2	Trichlorofluoromethane		5	4.78	ug/L	96	(70-130)	20	1.0
MBLK	Trichlorofluoromethane			<0.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	Trichlorofluoromethane		0.5	0.600	ug/L	120	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	4.68	ug/L	94	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	4.88	ug/L	98	(70-130)	20	4.2
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.610	ug/L	122	(50-150)		
LCS1	Vinyl chloride (VC)		5	4.63	ug/L	93	(70-130)		
LCS2	Vinyl chloride (VC)		5	4.82	ug/L	96	(70-130)	20	4.0
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.550	ug/L	110	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.280	ug/L	112	(50-150)		

Total Organic Carbon by SM 5310C

Analytical Batch: 1331117

Analysis Date: 05/28/2021

LCS1	Total Organic Carbon		5	5.03	mg/L	101	(90-110)		
LCS2	Total Organic Carbon		5	5.04	mg/L	101	(90-110)	20	0.20
MBLK	Total Organic Carbon			<0.10	mg/L				
MRL_CHK	Total Organic Carbon		0.2	0.257	mg/L	129	(50-150)		
MS_202105210602	Total Organic Carbon	2.2	4	6.17	mg/L	100	(80-120)		
MS2_202105180540	Total Organic Carbon	0.61	2	2.73	mg/L	106	(80-120)		
MSD_202105210602	Total Organic Carbon	2.2	4	6.08	mg/L	98	(80-120)	20	1.5
MSD2_202105180540	Total Organic Carbon	0.61	2	2.77	mg/L	108	(80-120)	20	1.3

ICP Metals by EPA 200.7

Analytical Batch: 1331521

Analysis Date: 06/01/2021

LCS1	Calcium Total ICAP		50	51.3	mg/L	103	(85-115)		
LCS2	Calcium Total ICAP		50	51.2	mg/L	102	(85-115)	20	0.20
MBLK	Calcium Total ICAP			<0.043087	mg/L				
MRL_CHK	Calcium Total ICAP		1	1.04	mg/L	104	(50-150)		
MS_202105200271	Calcium Total ICAP	ND	50	50.1	mg/L	100	(70-130)		
MS2_202105210186	Calcium Total ICAP	ND	50	50.2	mg/L	100	(70-130)		
MSD_202105200271	Calcium Total ICAP	ND	50	50.1	mg/L	100	(70-130)	20	0.095
MSD2_202105210186	Calcium Total ICAP	ND	50	49.5	mg/L	99	(70-130)	20	1.3
LCS1	Iron Total ICAP		5	5.13	mg/L	103	(85-115)		
LCS2	Iron Total ICAP		5	5.13	mg/L	103	(85-115)	20	0.0
MBLK	Iron Total ICAP			<0.004850	mg/L				
MRL_CHK	Iron Total ICAP		0.01	0.0103	mg/L	103	(50-150)		
MS_202105200271	Iron Total ICAP	ND	5	5.01	mg/L	100	(70-130)		
MS2_202105210186	Iron Total ICAP	ND	5	4.99	mg/L	100	(70-130)		
MSD_202105200271	Iron Total ICAP	ND	5	5.01	mg/L	100	(70-130)	20	0.070

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 936465
 Project: 0250000
 Group: WRD Pilot [Set #1]

Water Replenishment District

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MSD2_202105210186	Iron Total ICAP	ND	5	4.91	mg/L	98	(70-130)	20	1.6
LCS1	Magnesium Total ICAP		20	20.2	mg/L	101	(85-115)		
LCS2	Magnesium Total ICAP		20	20.2	mg/L	101	(85-115)	20	0.0
MBLK	Magnesium Total ICAP			<0.009606	mg/L				
MRL_CHK	Magnesium Total ICAP		0.1	0.0960	mg/L	96	(50-150)		
MS_202105200271	Magnesium Total ICAP	ND	20	20.1	mg/L	101	(70-130)		
MS2_202105210186	Magnesium Total ICAP	ND	20	20.1	mg/L	100	(70-130)		
MSD_202105200271	Magnesium Total ICAP	ND	20	20.0	mg/L	100	(70-130)	20	0.56
MSD2_202105210186	Magnesium Total ICAP	ND	20	19.8	mg/L	99	(70-130)	20	1.6
LCS1	Potassium Total ICAP		20	20.1	mg/L	100	(85-115)		
LCS2	Potassium Total ICAP		20	20.1	mg/L	101	(85-115)	20	0.0
MBLK	Potassium Total ICAP			<0.233312	mg/L				
MRL_CHK	Potassium Total ICAP		1	0.610	mg/L	61	(50-150)		
MS_202105200271	Potassium Total ICAP	ND	20	20.1	mg/L	101	(70-130)		
MS2_202105210186	Potassium Total ICAP	ND	20	20.4	mg/L	102	(70-130)		
MSD_202105200271	Potassium Total ICAP	ND	20	20.1	mg/L	101	(70-130)	20	0.10
MSD2_202105210186	Potassium Total ICAP	ND	20	20.2	mg/L	101	(70-130)	20	1.3
LCS1	Sodium Total ICAP		50	50.5	mg/L	101	(85-115)		
LCS2	Sodium Total ICAP		50	50.4	mg/L	101	(85-115)	20	0.20
MBLK	Sodium Total ICAP			<0.4255	mg/L				
MRL_CHK	Sodium Total ICAP		1	1.02	mg/L	102	(50-150)		
MS_202105200271	Sodium Total ICAP	1.0	50	50.2	mg/L	99	(70-130)		
MS2_202105210186	Sodium Total ICAP	2.9	50	51.8	mg/L	98	(70-130)		
MSD_202105200271	Sodium Total ICAP	1.0	50	50.3	mg/L	99	(70-130)	20	0.13
MSD2_202105210186	Sodium Total ICAP	2.9	50	50.9	mg/L	96	(70-130)	20	1.9

Dissolved Organic Carbon by SM 5310C

Analytical Batch: 1332949

Analysis Date: 06/07/2021

LCS1	Dissolved Organic Carbon		5	5.03	mg/L	101	(90-110)		
LCS2	Dissolved Organic Carbon		5	5.04	mg/L	101	(90-110)	20	0.20
MBLK	Dissolved Organic Carbon			<0.10	mg/L				
MRL_CHK	Dissolved Organic Carbon		0.2	0.253	mg/L	126	(50-150)		
MS_202106080234	Dissolved Organic Carbon	3.2	4	7.01	mg/L	94	(80-120)		
MS2_202106080235	Dissolved Organic Carbon	7.0	2	16.6	mg/L	96	(80-120)		
MSD_202106080234	Dissolved Organic Carbon	3.2	4	7.47	mg/L	106	(80-120)	20	6.3
MSD2_202106080235	Dissolved Organic Carbon	7.0	2	16.9	mg/L	99	(80-120)	20	1.9

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.



Non-Compliance Report of Analysis by 18-Hour Collert Test for Presence or Absence, Quantification of Fecal Coliform By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Fecal Coliform Small, Fecal Coliform Large), MPN/100 mL (Fecal Coliform), Presence/Absence (P/A)* (Fecal Coliform)

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 06/09/2021

Report of Analysis by 18-Hour Collilert Test for Presence or Absence, Quantification of Total Coliform and E.coli

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____
Comment: _____
Approved by: _____

Date of Issue: 06/09/2021

, Tel Fax

**Report of Analysis by 24-Hour Collert Test for
Presence or Absence, Quantification of Total Coliform and
E.coli**

PO #:
Project:
Phone #:

Date Received:
Sampled By:
Sample Project Group:

Attn:

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	# Pos Tubes		MPN/100ml		Pres/Abs (P/A)*	
					Tot Coli	E. Coli	Tot Coli	E. Coli	Tot Coli	E. Coli

*Presence or absence of Coliforms or growth is indicated as follows:P = Presence; A = Absence

Notification Required: _____

Comment: _____

Approved by: _____

Date of Issue: 06/09/2021

, Tel Fax

**Report of Analysis by 18-Hour Collert Test for
Presence or Absence of Total Coliform and E.Coli**

Attn: _____
Project: _____
Phone #: _____
Date Received: _____
Sampled By: _____
Sample Project Group: _____

Date/Time Sampled	Date/Time Prepped	Date/Time Analyzed	Lab#	Sample Description	Presence/Absence (P/A)*	
					Total Coliform	E. Coli

* Presence or absence of coliforms or growth is indicated as follows:
P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue:



Eaton Analytical

Laboratory Report:

Report of Analysis by 24-Hour Colilert Test for Presence or Absence, Quantification of Total Coliform and E. Coli By Quantitray

Project:
Phone #:
Date Received:
Sampled By:
Sample Project Group:

Attn:

Table with columns: Date/Time Sampled, Date/Time Prepped, Date/Time Analyzed, Lab#, Sample Description, # Positive Wells (Total Coliform Large, E. Coli Small, E. Coli Large), MPN/100 mL (Total Coliform, E. Coli), and Presence/Absence (P/A)* (Total Coliform, E. Coli).

* Presence or absence of coliforms or growth is indicated as follows:

P = Presence; A = Absence

Notification Required _____

Approved by _____

Date of Issue: 06/09/2021

Quant Report - Page 1 of 1

, Tel Fax

ANALYTICAL REPORT

Eurofins Calscience LLC
7440 Lincoln Way
Garden Grove, CA 92841
Tel: (714)895-5494

Laboratory Job ID: 570-59881-1
Client Project/Site: 936465

For:
Eurofins Eaton Analytical
750 Royal Oaks Drive
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:
5/29/2021 4:40:05 PM

Xuan Dang, Project Manager I
(714)895-5494
Xuan.Dang@eurofinset.com

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Eurofins Eaton Analytical
Project/Site: 936465

Job ID: 570-59881-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 936465

Job ID: 570-59881-1

Job ID: 570-59881-1

Laboratory: Eurofins Calscience LLC

Narrative

Job Narrative
570-59881-1

Comments

No additional comments.

Receipt

The sample was received on 5/21/2021 12:55 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Eurofins Eaton Analytical
Project/Site: 936465

Job ID: 570-59881-1

Client Sample ID: 202105200592

Lab Sample ID: 570-59881-1

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

Client Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 936465

Job ID: 570-59881-1

General Chemistry

Client Sample ID: 202105200592

Date Collected: 05/20/21 10:21

Date Received: 05/21/21 12:55

Lab Sample ID: 570-59881-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.512	mg/L		05/26/21 09:19	05/26/21 09:19	1

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QC Sample Results

Client: Eurofins Eaton Analytical
Project/Site: 936465

Job ID: 570-59881-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 570-153125/1-A
Matrix: Water
Analysis Batch: 153235

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 153125

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM: Oil and Grease	ND		1.00	0.510	mg/L		05/26/21 09:19	05/26/21 09:19	1

Lab Sample ID: LCS 570-153125/2-A
Matrix: Water
Analysis Batch: 153235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 153125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM: Oil and Grease	40.0	37.00		mg/L		93	78 - 114

Lab Sample ID: LCSD 570-153125/3-A
Matrix: Water
Analysis Batch: 153235

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 153125

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM: Oil and Grease	40.0	36.10		mg/L		90	78 - 114	2	18

QC Association Summary

Client: Eurofins Eaton Analytical
Project/Site: 936465

Job ID: 570-59881-1

General Chemistry

Prep Batch: 153125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-59881-1	202105200592	Total/NA	Water	1664A	
MB 570-153125/1-A	Method Blank	Total/NA	Water	1664A	
LCS 570-153125/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 570-153125/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 153235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-59881-1	202105200592	Total/NA	Water	1664A	153125
MB 570-153125/1-A	Method Blank	Total/NA	Water	1664A	153125
LCS 570-153125/2-A	Lab Control Sample	Total/NA	Water	1664A	153125
LCSD 570-153125/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	153125

Lab Chronicle

Client: Eurofins Eaton Analytical
Project/Site: 936465

Job ID: 570-59881-1

Client Sample ID: 202105200592

Lab Sample ID: 570-59881-1

Date Collected: 05/20/21 10:21

Matrix: Water

Date Received: 05/21/21 12:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664A			996 mL	1000 mL	153125	05/26/21 09:19	UWEZ	ECL 1
Total/NA	Analysis	1664A		1			153235	05/26/21 09:19	USUL	ECL 1

Instrument ID: NOEQUIP

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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Accreditation/Certification Summary

Client: Eurofins Eaton Analytical
Project/Site: 936465

Job ID: 570-59881-1

Laboratory: Eurofins Calscience LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0161	11-19-21
California	Los Angeles County Sanitation Districts	10109	09-30-21
California	SCAQMD LAP	17LA0919	11-30-21
California	State	2944	09-30-21
Guam	State	20-003R	10-31-20 *
Nevada	State	CA00111	07-31-21
Oregon	NELAP	CA300001	01-30-22
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-11-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 936465

Job ID: 570-59881-1

Method	Method Description	Protocol	Laboratory
1664A	HEM and SGT-HEM	1664A	ECL 1
1664A	HEM and SGT-HEM (Aqueous)	1664A	ECL 1

Protocol References:

1664A = EPA-821-98-002

Laboratory References:

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



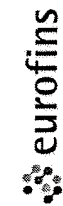
Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 936465

Job ID: 570-59881-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
570-59881-1	202105200592	Water	05/20/21 10:21	05/21/21 12:55	

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Eaton Analytical

Ship To:
Eurofins CalScience
7440 Lincoln Way
Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 936465
Report Due: 06/03/2021

59881

Submittal Form

Date: 5/21/2021

*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!
Report & Invoice must have the Folder # 936465 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report.
Results must have Complete data & QC with Approval Signature

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: Eaton-MonroviaSubContract@eurofinset.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the
Specified State Certification # and
Exp Date for requested tests + matrix.
Samples from: CALIFORNIA

Sample ID 202105200592	Client Sample ID for reference on! LH-INF-20210520	Sample Date & Time 05/20/21 1021 DW	PWS Systemcode PWSID	JLS
Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:

Method EPA 1664
Prep Method
Analysis Requested
Oil and Grease by 1664(subbed)



570-59881 Chain of Custody

Relinquished by: Xm Sample Control Date 5/21/21 Time 1255

Received by: Yan TC Date 5/21/21 Time 1255

Relinquished by: _____ Sample Control Date _____ Time _____

Received by: _____ Date _____ Time _____

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

20/2.6 SCS



Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-59881-1

Login Number: 59881

List Source: Eurofins Calscience LLC

List Number: 1

Creator: Le, Danny

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

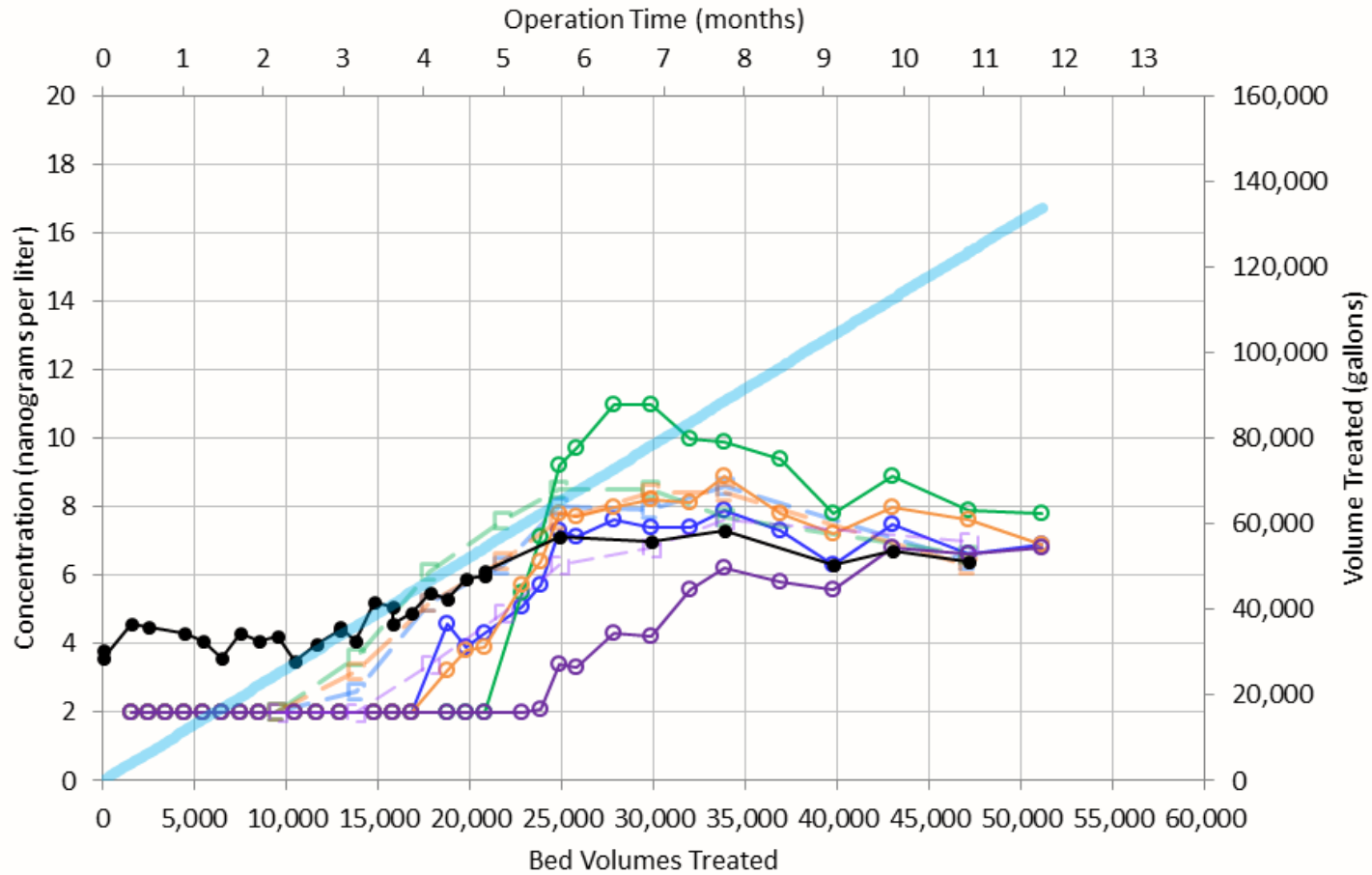
**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED
CARBON TO TREAT GROUNDWATER IMPACTED WITH
PER- AND POLYFLUOROALKYL SUBSTANCES
MONTEBELLO LAND & WATER COMPANY – WATER SUPPLY WELL #7**

Appendix D

Other PFAS Breakthrough Curves

- Figure D1 MTBLW Well #7 Perfluorohexanoic Acid (PFHxA) GAC Breakthrough Curves*
- Figure D2 MTBLW Well #7 Perfluoroheptanoic Acid (PFHpA) GAC Breakthrough Curves*
- Figure D3 MTBLW Well #7 Perfluorononanoic Acid (PFNA) GAC Breakthrough Curves*
- Figure D4 MTBLW Well #7 Perfluorobutanesulfonic Acid (PFBS) GAC Breakthrough Curves*
- Figure D5 MTBLW Well #7 Perfluorohexanesulfonic Acid (PFHxS) GAC Breakthrough Curves*
- Figure D6 MTBLW Well #7 Perfluorohexanoic Acid (PFHxA) IX Breakthrough Curves*
- Figure D7 MTBLW Well #7 Perfluoroheptanoic Acid (PFHpA) IX Breakthrough Curves*
- Figure D8 MTBLW Well #7 Perfluorononanoic Acid (PFNA) IX Breakthrough Curves*
- Figure D9 MTBLW Well #7 Perfluorobutanesulfonic Acid (PFBS) IX Breakthrough Curves*
- Figure D10 MTBLW Well #7 Perfluorohexanesulfonic Acid (PFHxS) IX Breakthrough Curves*

MTBLW Well #7 - Perfluorohexanoic acid (PFHxA) GAC Samples



Notes:

1. The influent PFHxA concentration from Day 26 (May 19, 2020) was anomalously low, not detected above the reporting limit of 2 nanograms per liter (ng/L), and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021
3. "M" on treatment samples indicates mid-point sample.
4. F400 = Filtrasorb 400; GAC = granular activated carbon.
5. MTBLW = Montebello Land and Water Company.

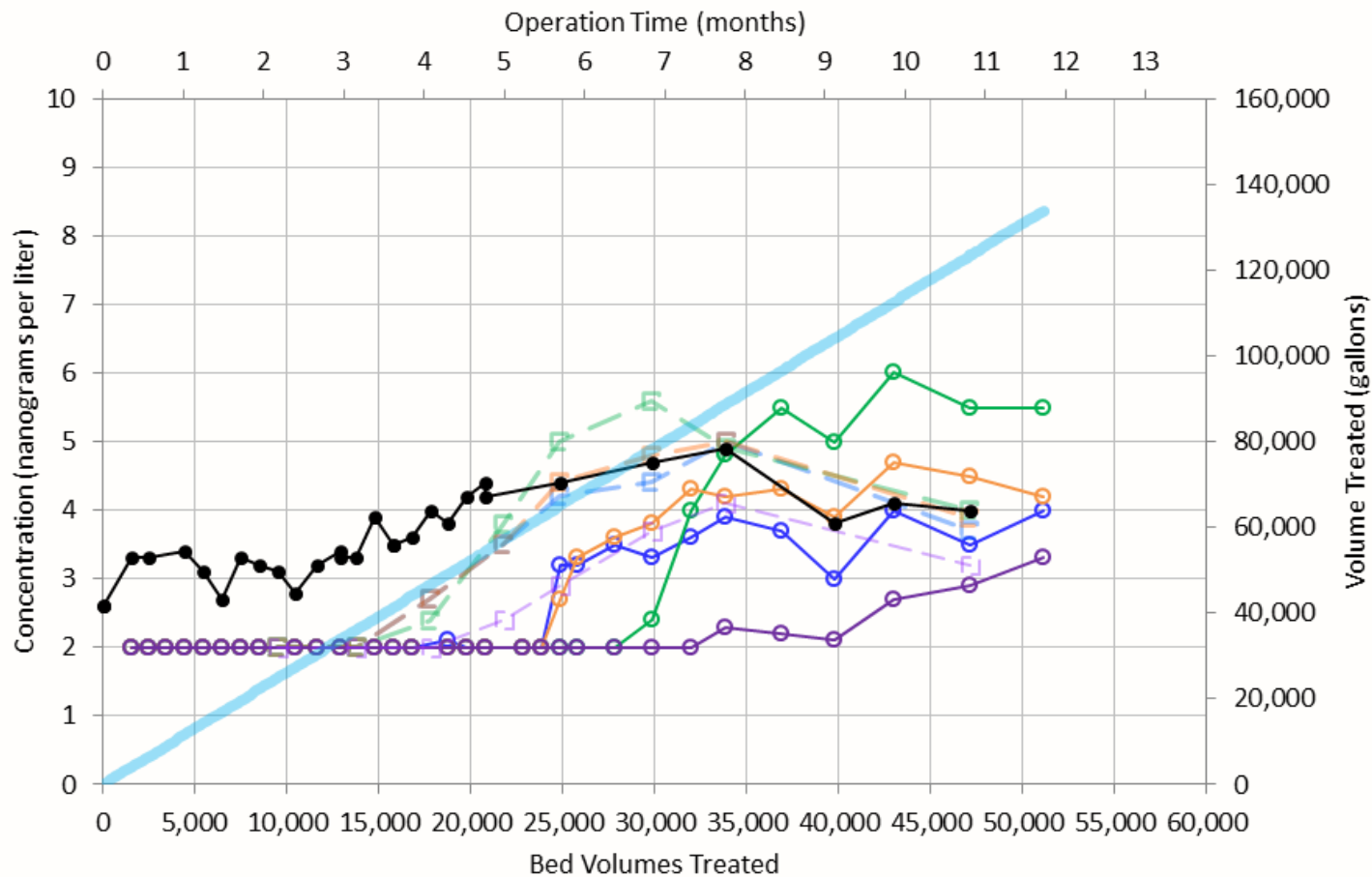
- AV1240CB
- AV1240CB M
- AV1240LDX
- AV1240LDX M
- AV1240PFAS
- AV1240PFAS M
- F400
- F400 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	17-Aug-21	Chk'd By:	MJ
Revised:		Apr'v'd By:	
Scale:		Figure D1	

MTBLW WELL #7
PFHxA GAC BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluoroheptanoic acid (PFHpA) GAC Samples



Notes:

1. The influent PFHpA concentration from Day 26 (May 19, 2020) was anomalously low, not detected above the reporting limit of 2 nanograms per liter (ng/L), and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021
3. "M" on treatment samples indicates mid-point sample.
4. F400 = Filtrasorb 400; GAC = granular activated carbon.
5. MTBLW = Montebello Land and Water Company.

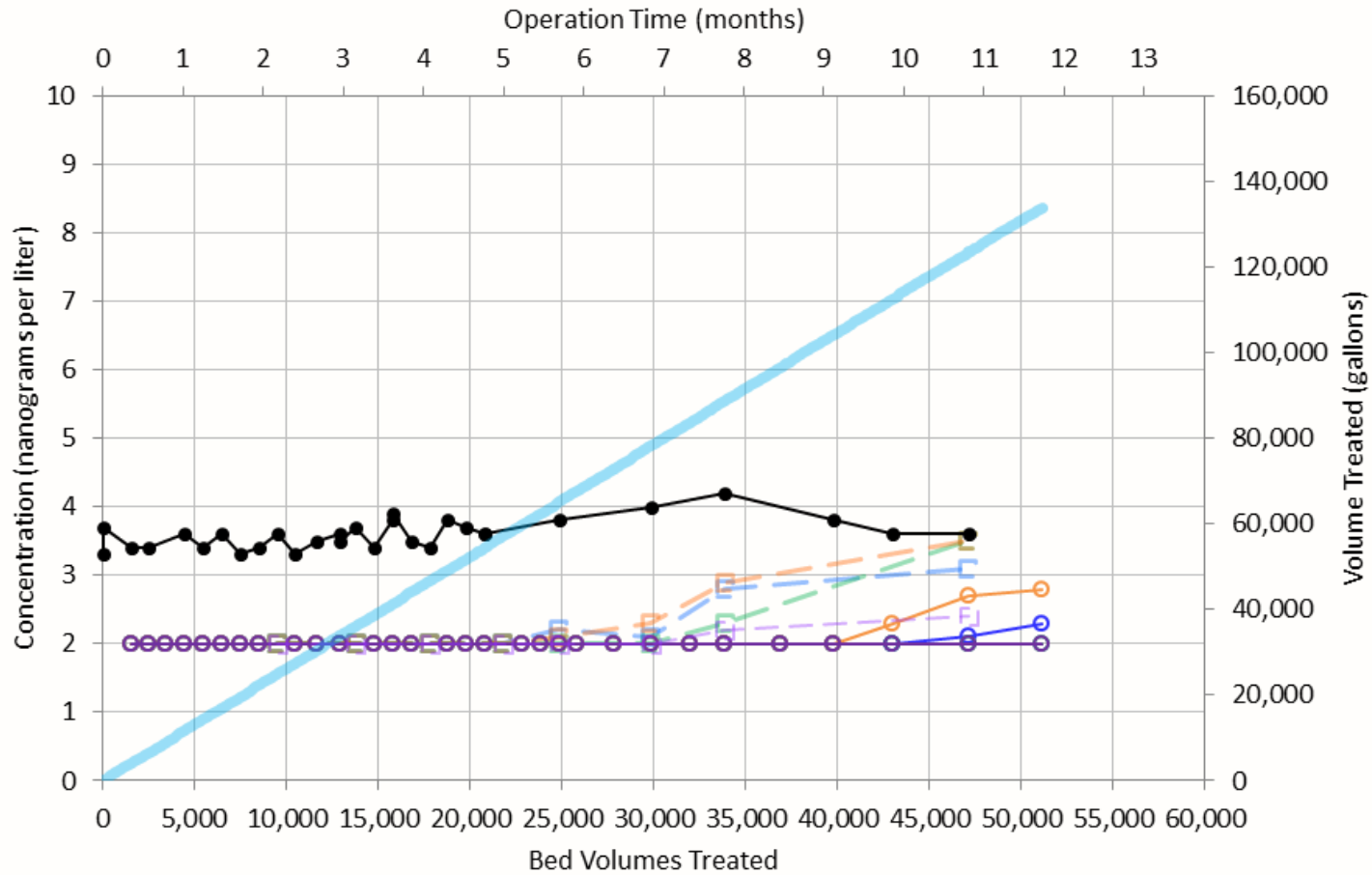
- AV1240CB
- AV1240CB M
- AV1240LDX
- AV1240LDX M
- AV1240PFAS
- AV1240PFAS M
- F400
- F400 M
- Influent
- Water Volume Treated



GSI Job No. 5302	Drawn By: GM
Issued: 17-Aug-21	Chk'd By: MJ
Revised:	Apr'v'd By:
Scale:	Figure D2

MTBLW WELL #7
PFHpA GAC BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluorononanoic acid (PFNA) GAC Samples



Notes:

1. The influent PFBS concentration from Day 26 (May 19, 2020) was anomalously low at 3.6 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021
3. "M" on treatment samples indicate mid-point sample.
4. F400 = Filtrasorb 400; GAC = granular activated carbon.
5. MTBLW = Montebello Land and Water Company.

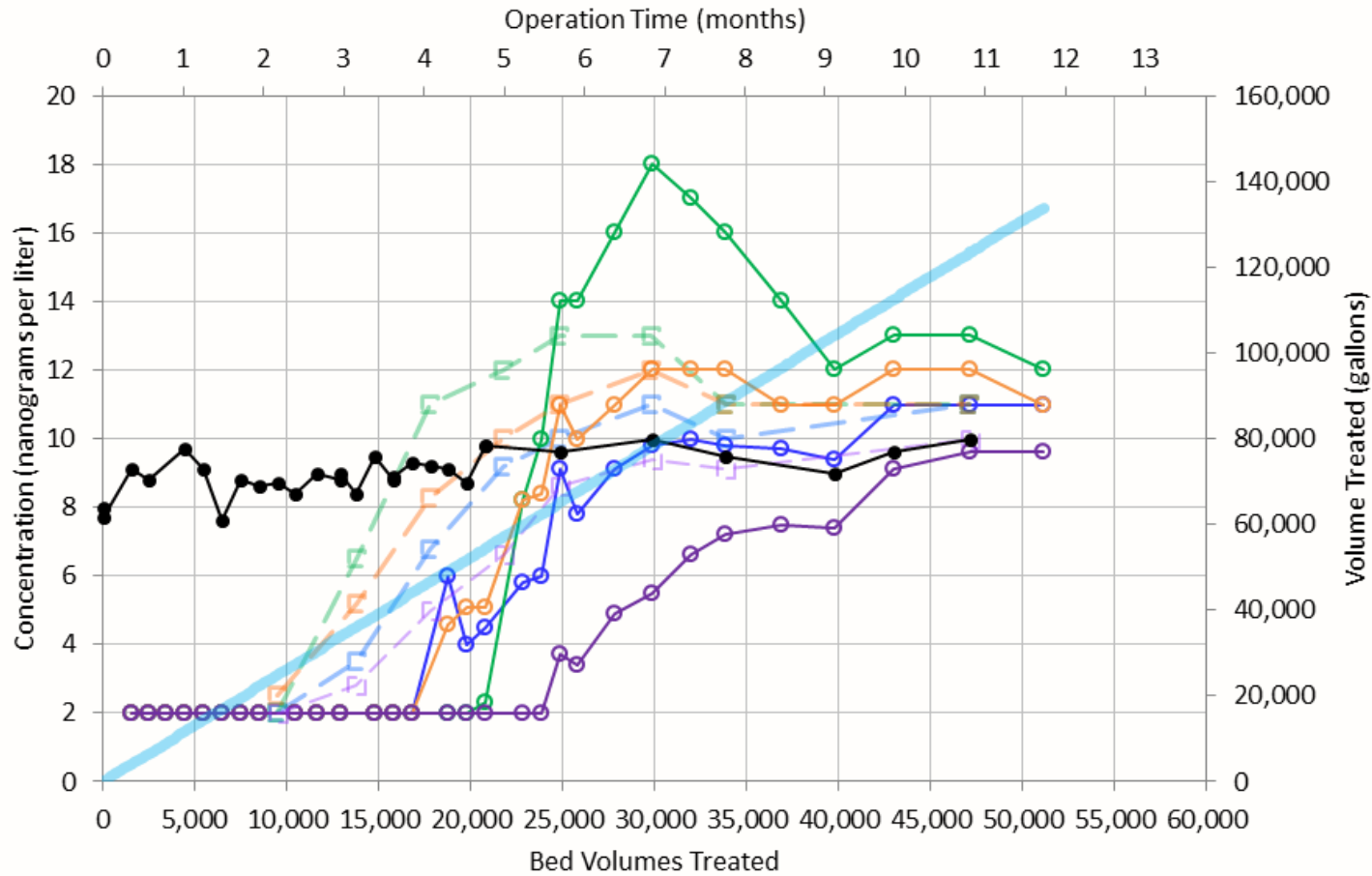
- AV1240CB
- AV1240CB M
- AV1240LDX
- AV1240LDX M
- AV1240PFAS
- AV1240PFAS M
- F400
- F400 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	17-Aug-21	Chk'd By:	MJ
Revised:		Apr'd By:	
Scale:		Figure D3	

MTBLW WELL #7
PFNA GAC BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluorobutanesulfonic acid (PFBS) GAC Samples



Notes:

1. The influent PFBS concentration from Day 26 (May 19, 2020) was anomalously low at 3.6 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021
3. "M" on treatment samples indicate mid-point sample.
4. F400 = Filtrasorb 400; GAC = granular activated carbon.
5. MTBLW = Montebello Land and Water Company.

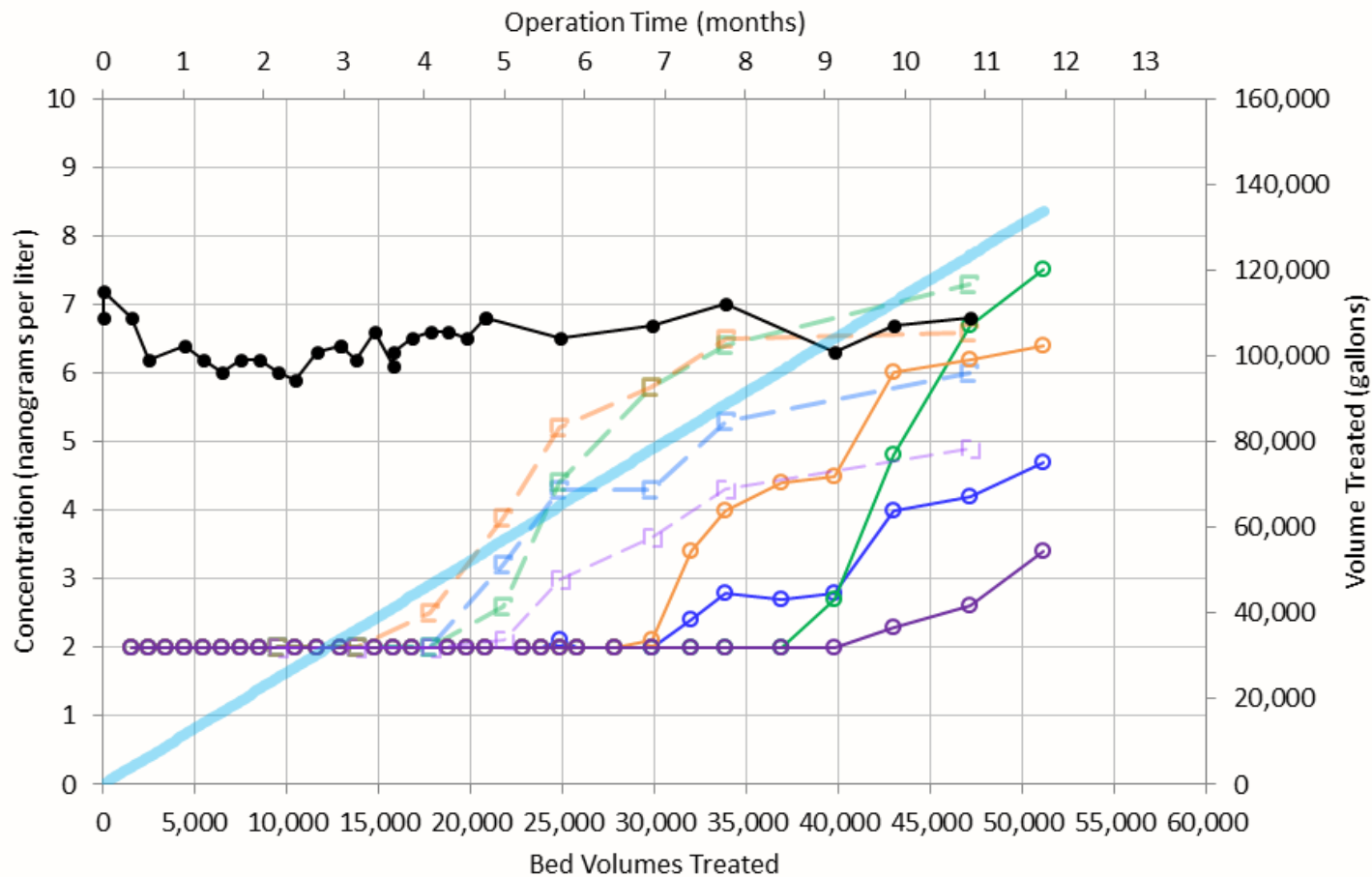
- AV1240CB
- AV1240CB M
- AV1240LDX
- AV1240LDX M
- AV1240FPAS
- AV1240FPAS M
- F400
- F400 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	17-Aug-21	Chk'd By:	MJ
Revised:		Apr'd By:	
Scale:		Figure D4	

MTBLW WELL #7
PFBS GAC BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluorohexanesulfonic acid (PFHxS)
GAC Samples



Notes:

1. The influent PFBS concentration from Day 26 (May 19, 2020) was anomalously low at 3.6 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021
3. "M" on treatment samples indicate mid-point sample.
4. F400 = Filtrasorb 400; GAC = granular activated carbon.
5. MTBLW = Montebello Land and Water Company.

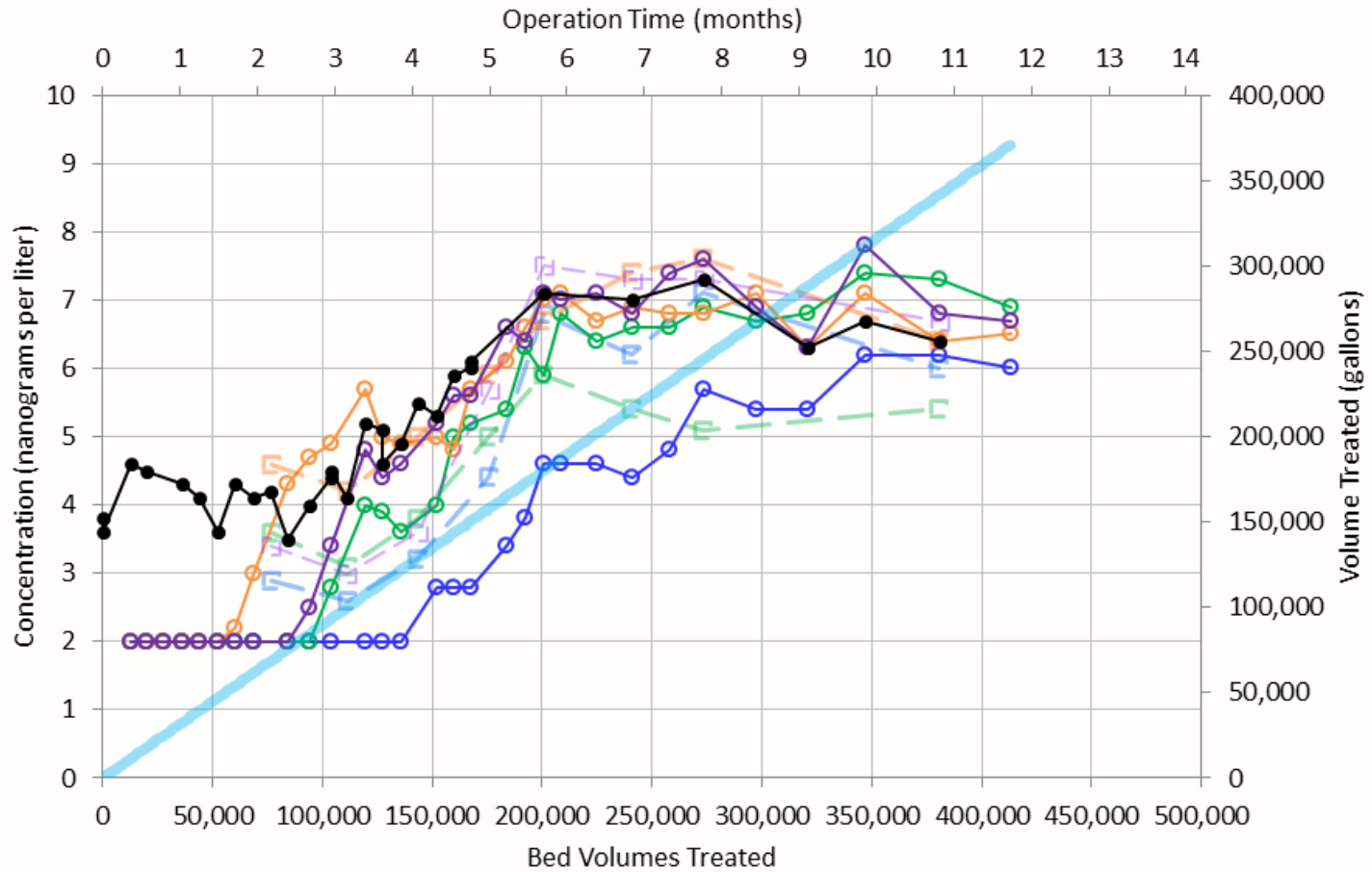
- AV1240CB
- AV1240LDX
- AV1240FPAS
- F400
- Influent
- AV1240CB M
- AV1240LDX M
- AV1240FPAS M
- F400 M
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	17-Aug-21	Chk'd By:	MJ
Revised:		Apr'v'd By:	
Scale:		Figure D5	

MTBLW WELL #7
PFHxS GAC BREAKTHROUGH CURVES
PFAS Treatment Pilot Study
Water Replenishment District of Southern California

MTBLW Well #7 - Perfluorohexanoic acid (PFHxA) IX Samples



Notes:

1. The influent PFHxA concentration from Day 26 (May 19, 2020) was anomalous low, not detected above the reporting limit of 2 nanograms per liter (ng/L), and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021.
3. "M" on treatment samples indicates mid-point sample.
4. IX = ion exchange.
5. MTBLW = Montebello Land and Water Company.

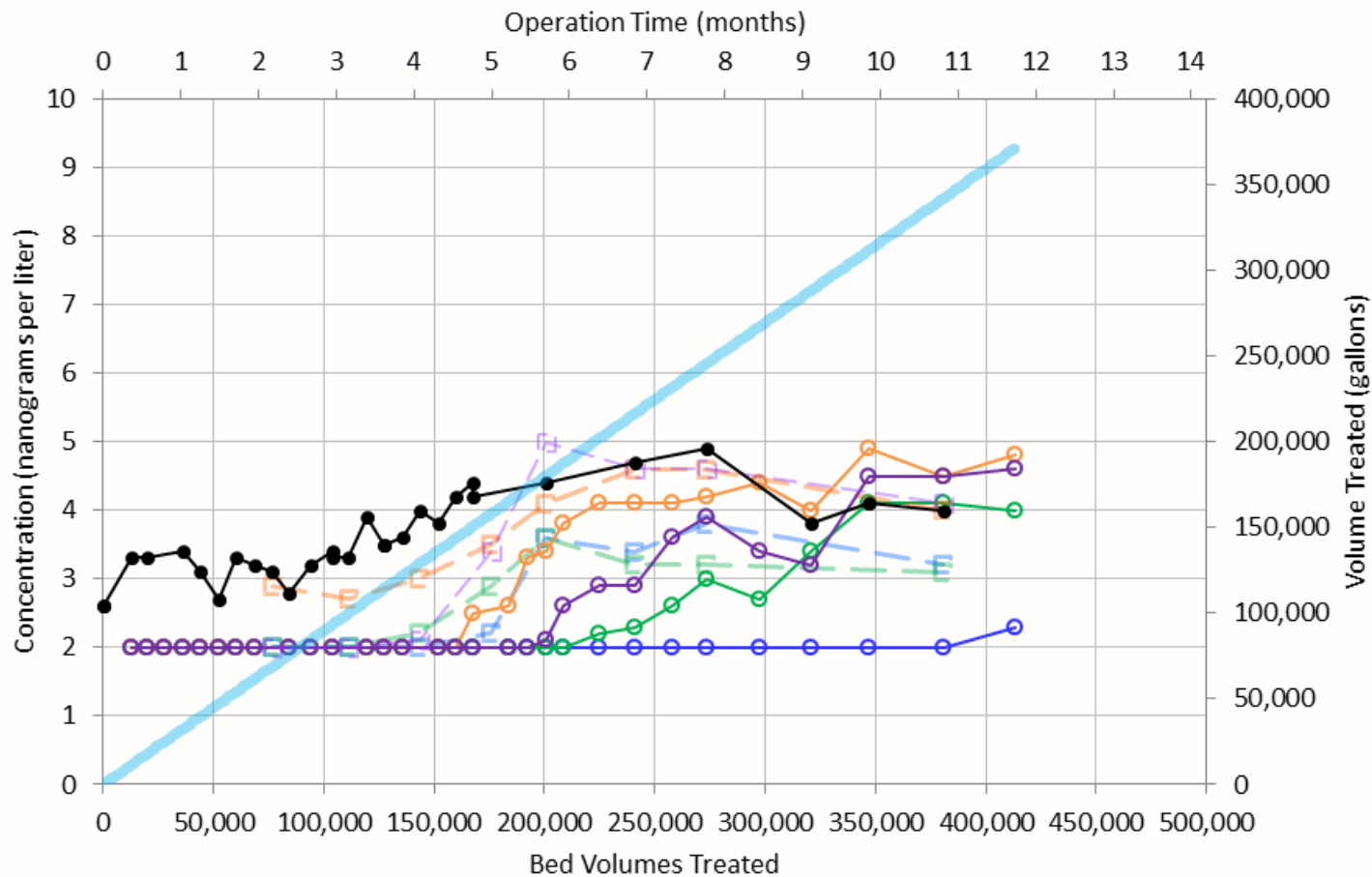
- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	17-Aug-21	Chk'd By:	MJ
Revised:		Apr'd By:	
Scale:		Figure D6	

MTBLW WELL #7
PFHxA IX BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluoroheptanoic acid (PFHpA) IX Samples



Notes:

1. The influent PFHpA concentration from Day 26 (May 19, 2020) was anomalously low, not detected above the reporting limit of 2 nanograms per liter (ng/L), and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021.
3. "M" on treatment samples indicates mid-point sample.
4. IX = ion exchange.
5. MTBLW = Montebello Land and Water Company.

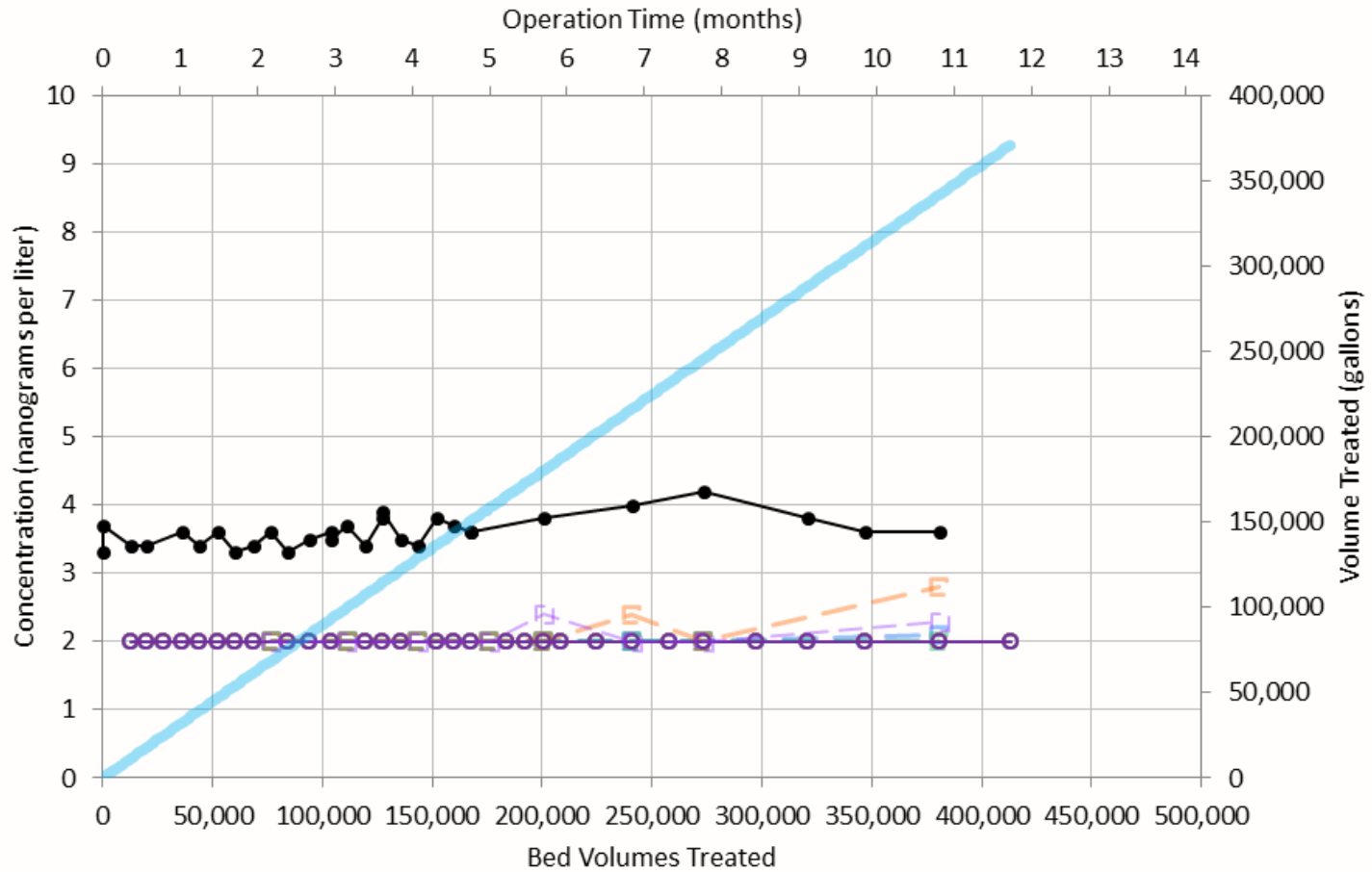
- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	17-Aug-21	Chk'd By:	MJ
Revised:		Apr'v'd By:	
Scale:		Figure D7	

MTBLW WELL #7
PFHpA IX BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluorononanoic acid (PFNA) IX Samples



Notes:

1. The influent PFBS concentration from Day 26 (May 19, 2020) was anomalously low at 3.6 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021
3. "M" on treatment samples indicate mid-point sample.
4. IX = ion exchange.
5. MTBLW = Montebello Land and Water Company.

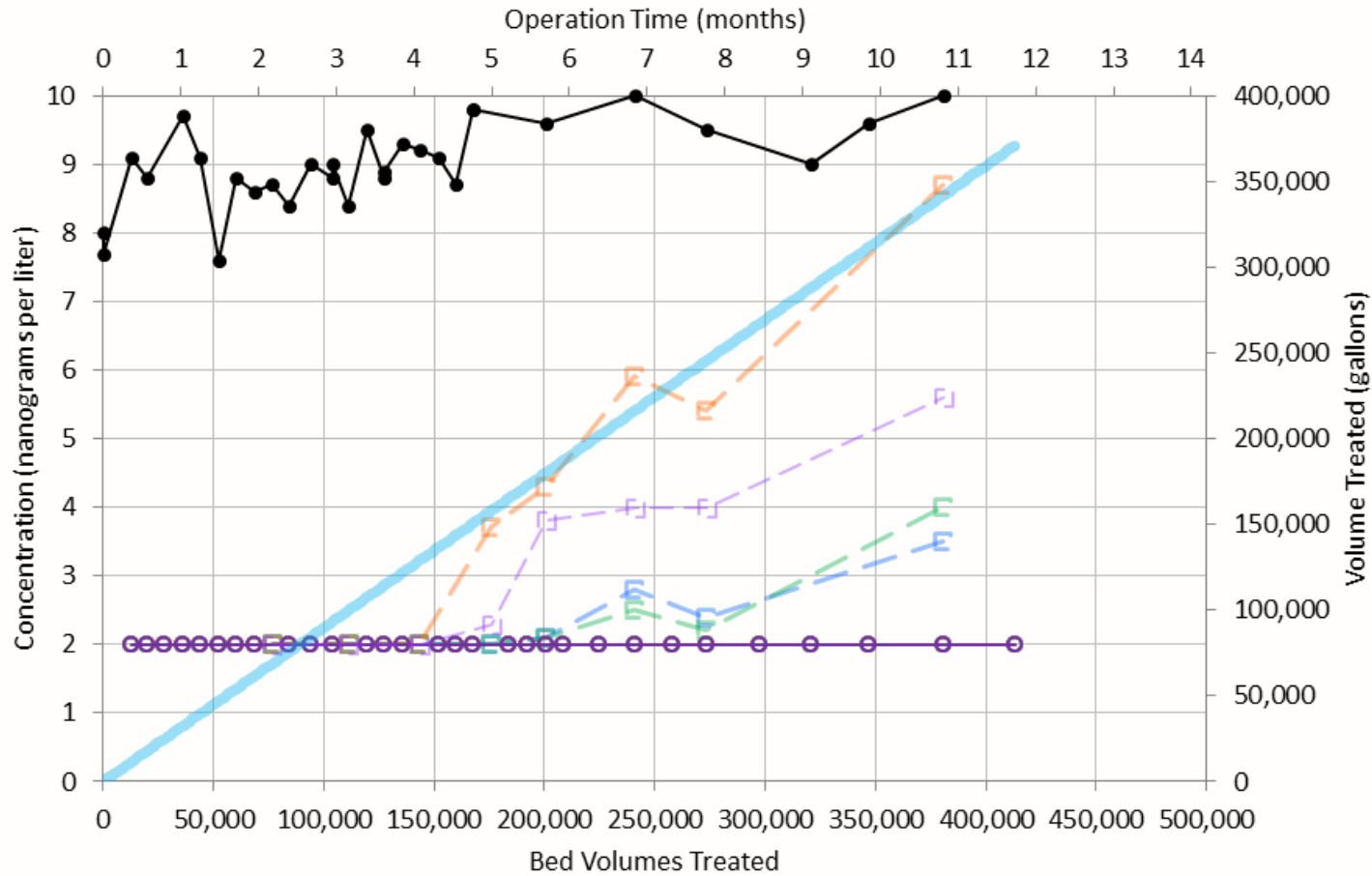
- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	17-Aug-21	Chk'd By:	MJ
Revised:		Apr'd By:	
Scale:		Figure D8	

MTBLW WELL #7
PFNA IX BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluorobutanesulfonic acid (PFBS) IX Samples



Notes:

1. The influent PFBS concentration from Day 26 (May 19, 2020) was anomalously low at 3.6 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021.
3. "M" on treatment samples indicate mid-point sample.
4. IX = ion exchange.
5. MTBLW = Montebello Land and Water Company.

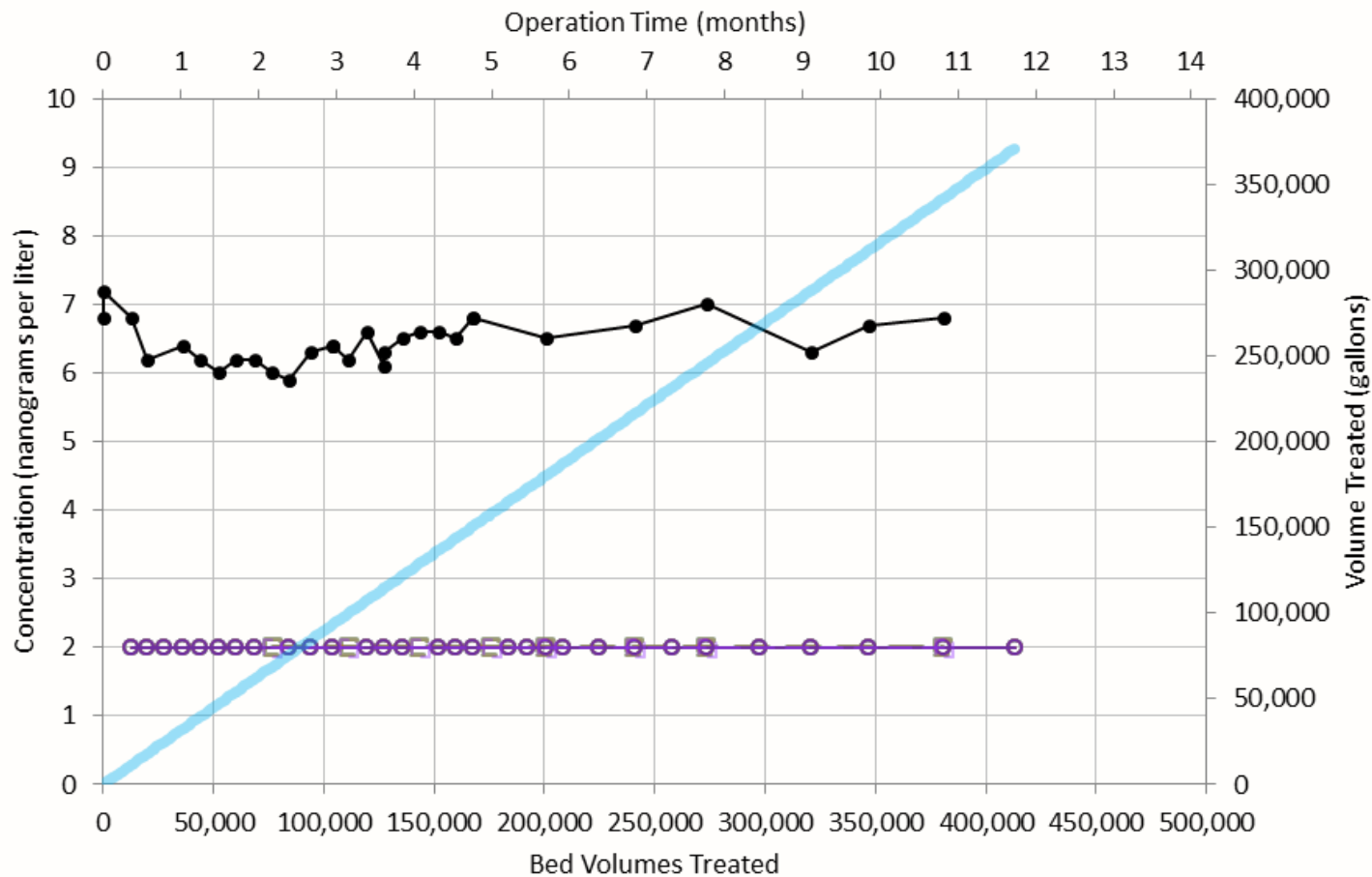
- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No.	5302	Drawn By:	GM
Issued:	17-Aug-21	Chk'd By:	MJ
Revised:		Apr'v'd By:	
Scale:		Figure D9	

MTBLW WELL #7
PFBS IX BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

MTBLW Well #7 - Perfluorohexanesulfonic acid (PFHxS) IX Samples



Notes:

1. The influent PFBS concentration from Day 26 (May 19, 2020) was anomalously low at 3.6 nanograms per liter (ng/L) and is not charted.
2. Well #7 was off for 5 days from February 4, 2021 to February 9, 2021
3. "M" on treatment samples indicate mid-point sample.
4. IX = ion exchange.
5. MTBLW = Montebello Land and Water Company.

- PSR2 Plus
- PSR2 Plus M
- SIR-110-HP
- SIR-110-HP M
- PFA694E
- PFA694E M
- PFCR-2
- PFCR-2 M
- Influent
- Water Volume Treated



GSI Job No. 5302	Drawn By: GM
Issued: 17-Aug-21	Chk'd By: MJ
Revised:	Apr'd By:
Scale:	Figure D10

MTBLW WELL #7
PFHxS IX BREAKTHROUGH CURVES
 PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

**PILOT TEST RESULTS FOR ION EXCHANGE RESIN AND GRANULAR ACTIVATED
CARBON TO TREAT GROUNDWATER IMPACTED WITH
PER- AND POLYFLUOROALKYL SUBSTANCES
MONTEBELLO LAND & WATER COMPANY – WATER SUPPLY WELL #7**

Appendix E

Data Usability Summary

APPENDIX E

DATA USABILITY SUMMARY

La Habra Heights County Water District Well #10 (Intersection of Saragosa Street and Norwalk Boulevard, Whittier, California)
Montebello Land & Water Company Well #7 (344 East Madison Avenue Montebello, California)

GSI Environmental Inc. (GSI) reviewed the field methods and analytical laboratory reports for water samples collected at Montebello Land & Water Company Well #7 located 344 East Madison Avenue Montebello, California (Site #1) and La Habra Heights County Water District Well #10 located at the intersection of Saragosa Street and Norwalk Boulevard, Whittier, California (Site #2). Many of the water sampling events were conducted during the same mobilizations and some laboratory reports reflect combined data for both the La Habra Heights Well #10 site and the Montebello Well #7 site; therefore, this Data Usability Summary reflects the review and validation of data from both of the well sites. The data were collected to evaluate the following:

- The efficiency and effectiveness of four different types of Granular Activated Carbon (GAC) and four different types of Ion Exchange (IX) resin for per- and polyfluoroalkyl substances (PFAS) removal.
- The PFAS breakthrough through these media as well as the ability to remove PFAS compounds to below the RLs.

The laboratory reports were reviewed to evaluate data usability of the analytical results in accordance with the following guidance documents:

- USEPA, 2018, Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using EPA Method 537 (EPA 910-R-18-001).
- United States Environmental Protection Agency (USEPA), 2017, National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA 540-R-2017-001); and
- USEPA, 2017, National Functional Guidelines for Organic Data Review (EPA 540-R-014-002).

Project samples were analyzed by the following analytical laboratory:

- Eurofins Eaton Analytical of Monrovia, California (Eurofins)

At the time the laboratory data were generated for this project, the laboratory was accredited by the National Environmental Laboratory Accreditation Program (NELAP) and California Environmental Laboratory Accreditation Program (CA ELAP) for the matrices and methods of analysis.

SUMMARY OF DATA EVALUATED

GSI reviewed 710 water samples reported in the following 41 Eurofins laboratory reports which are included in **Appendix C**:

- | | | | | | |
|----------|----------|----------|----------|----------|----------|
| • 866700 | • 875389 | • 884399 | • 893261 | • 904643 | • 925810 |
| • 869296 | • 876642 | • 885690 | • 894497 | • 904644 | • 931039 |
| • 869571 | • 877883 | • 887122 | • 895705 | • 906889 | • 936465 |
| • 870644 | • 878992 | • 888431 | • 897233 | • 909215 | • 938766 |
| • 871876 | • 879945 | • 889747 | • 898631 | • 911833 | • 938769 |
| • 872940 | • 881682 | • 890914 | • 899759 | • 915470 | • 941985 |
| • 874079 | • 883523 | • 891987 | • 902203 | • 920474 | |

Project samples were analyzed for the following analyses and compounds.

- The following PFAs compounds using EPA method 537.1:
 - 11-chloroeicosafluoro-3-oxaundecane-sulfonic acid
 - 4,8-dioxa-3H-perfluorononanoic acid (ADONA)
 - 9-chlorohexadecafluoro-3-oxanone-sulfonic acid
 - Hexafluoropropylene oxide dimer acid (HFPO-DA)
 - N-ethyl Perfluorooctanesulfonamidoacetic acid
 - N-methyl Perfluorooctanesulfonamidoacetic acid
 - Perfluorobutanesulfonic acid (PFBS)
 - Perfluorodecanoic acid (PFDA)
 - Perfluorododecanoic acid (PFDoA)
 - Perfluoroheptanoic acid (PFHpA)
 - Perfluorohexanesulfonic acid (PFHxS)
 - Perfluorohexanoic acid (PFHxA)
 - Perfluorononanoic acid (PFNA)
 - Perfluorooctanesulfonic acid (PFOS)
 - Perfluorooctanoic acid (PFOA)
 - Perfluorotetradecanoic acid (PFTA)
 - Perfluorotridecanoic acid (PFTTrDA)
 - Perfluoroundecanoic acid (PFUnA)
- VOCs using EPA method 524.2
- Total Suspended Solids (TSS) using method SM2540D
- Total Dissolved Solids (TDS) using method E160.1/SM2540C
- Oil and Grease using method EPA method 1664A
- Sodium, potassium, magnesium, and iron using method EPA method 200.7
- Arsenic, manganese, and uranium using method EPA method 200.8
- Hexavalent chromium using method EPA method 218.6
- Nitrite as nitrogen, nitrate as nitrogen, chloride, sulfate using method EPA method 300.0
- Perchlorate using method EPA method 314.0
- Total and dissolved organic carbon using method SM5310C
- Alkalinity in CaCO₃ using method SM2340B
- Total Hardness using method SM2340B

Table E-1 lists the sample identification numbers included in this review, cross-referenced to laboratory identifications.

DATA REVIEW

The data quality review included an evaluation of the following quality assurance/quality control (QA/QC) criteria:

- Preservation and Holding Times
- Blank Sample Analysis
- Internal Standard and Surrogate Recoveries
- Laboratory Control Samples

- Replicate Samples

For replicate samples, the relative percent difference (RPD) was used to evaluate the data. RPD was calculated using the following formula:

$$RPD = \frac{|x_1 - x_2|}{\bar{x}} \times 100$$

Where:

- x_1 = analyte concentration in primary sample
- x_2 = analyte concentration in duplicate sample
- \bar{x} = average of x_1 and x_2

Definition of Data Qualifiers

The following qualifiers were applied to a limited percentage of sample analytical data, as described in the following sections:

Qualifier	Definition
J	The result is an estimated concentration. The associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Preservation and Holding Time

Samples were evaluated for agreement with the chain-of-custody by the laboratory upon receipt as well as the following:

- All samples were received by the laboratory in good condition and were in the appropriate containers with preservatives.
- All chain of custody paperwork was completed properly.
- The temperature inside the coolers for samples were within the acceptable criteria of 0 to 6°C upon receipt by the laboratory, except for the samples delivered to the laboratory within 24 hours which had receipt temperatures higher than 6°C. No qualifications were applied.

Samples were all analyzed within holding times except the following:

- Eurofins Lab Report 925810: alkalinity as CaCO₃ and TSS for LH-INF-20210325 and MB-INF-20210325 were analyzed outside of holding time.
 - The holding time for alkalinity as CaCO₃ using method SM2320B is 14 days. Samples LH-INF-20210325 and MB-INF-20210325 were collected on March 25, 2021 and Eurofins analyzed the sample on April 13 and April 14, 2021 (19 and 20 days later), respectively for alkalinity in CaCO₃. Alkalinity as CaCO₃ results for both LH-INF-20210325 and MB-INF-20210325 were flagged with J-qualifiers.
 - The holding time for TSS is seven days. Samples LH-INF-20210325 and MB-INF-20210325 were collected on March 25, 2021 and Eurofins analyzed the sample on April 2, 2021 for TSS (8 days later). TSS results for both LH-INF-20210325 and MB-INF-20210325 were flagged with UJ-qualifiers.

Method Blanks

No analytes were detected in laboratory method blank samples except for the following:

- Eurofins Lab Report 925810: arsenic was detected in the method blank for analytical batch 1316698 associated with samples LH-INF-20210325 and MB-INF-20210325. Results for arsenic for both samples were flagged with J-qualifiers.

Internal Standard and Surrogate Recoveries

Internal standard and surrogate recoveries were within project quality objectives except for the following analyses for PFAS compounds using EPA method 537.1:

Eurofins Lab Report 870644:

- Surrogate recoveries for two surrogates were high and outside laboratory criteria for sample GAC-5-20200512. Results may be biased high. Since the associated PFAS compounds were ND in the sample, no flags were applied.

Eurofins Lab Report 871876:

- Surrogate recoveries for two surrogates were high and outside laboratory criteria for sample GAC-1-20200519. Results may be biased high. Since the associated PFAS compounds were ND in the sample, no flags were applied.
- Surrogate recoveries for four surrogates were low and outside laboratory criteria for sample MB-INF-20200519. The associated PFAS compounds were ND. Since the sample results may be biased low, the UJ qualifier was applied. Compounds are listed in the table below.

Sample ID	Analyte Qualified with UJ
MB-INF-20200519	Hexafluoropropylene oxide dimer acid (HFPO-DA)
	N-ethyl Perfluorooctanesulfonamidoacetic acid
	Perfluorodecanoic acid (PFDA)
	Perfluorohexanoic acid (PFHxA)

Laboratory Control Samples

Laboratory control sample (LCS) and laboratory control sample duplicates (LCSD) recoveries and/or associated RPDs were within laboratory acceptance limits except for the following:

- Eurofins Lab Report 870644: LCS recoveries for PFTA using EPA method 537.1. The recovery exceeded laboratory criteria. However, based on the LCSD and RPD results, no data qualifiers were applied.
- Eurofins Lab Report 884399: LCS recoveries for 1,2,3-trichlorobenzene, 2,2-dichloropropane, naphthalene, and tert-amyl methyl ether using EPA method 524.2. LCS recoveries were high in each exceedance compared to laboratory limits; since these

analytes were ND in samples MB-INF-20200730 and LH-INF-20200730, no qualifiers were applied.

- Eurofins Lab Report 884399: RPD recoveries for 1,2,3-trichlorobenzene and naphthalene using EPA method 524.2. RPDs for these compounds exceeded laboratory criteria; however, since the corresponding sample results that were potentially biased high (based on LCS recovery) also were ND, no flags were applied for the RPD exceedance.
- Eurofins Lab Report 893261: LCS recoveries for bromochloromethane and chloroform using EPA method 524.2. Recoveries were high in each exceedance compared to laboratory limits; since these analytes were ND in samples MB-INF-20200917 and LH-INF-20200917, no qualifiers were applied.
- Eurofins Lab Report 893261: RPD recoveries for 1,1,1-trichloroethane and chloroform using EPA method 524.2. RPDs for these compounds exceeded laboratory criteria; however, since these analytes were ND in the corresponding samples, no flags were applied.
- Eurofins Lab Report 909215: RPD recovery for tert-butyl ethyl ether using EPA method 524.2. Recovery exceeded laboratory criteria. However, the LCS and LCSD were within recovery limits; no flag was applied.
- Eurofins Lab Report 941985: LCS recovery for 1,3-dichlorobenzene EPA method 524.2. Recovery exceeded laboratory criteria. No LCSD was analyzed. However, based on the sample result being ND, no flag was applied.

Matrix Spike and Matrix Spike Duplicates

The percent recoveries for the matrix spike (MS), matrix spike duplicates (MSD), and RPDs for project samples were all within laboratory and method acceptance limits.

FIELD SAMPLING PROCEDURES

The following field and laboratory data were reviewed:

- Field notes with respect to field instrumentation calibration, sampling procedures, and preservation procedures prior to delivering the samples to the laboratory.
- Reportable data and laboratory report case narratives.

Section 3 of the report contains further details of sample collection procedures.

Field Precision

Field precision of system influent analysis was evaluated by comparing the RPD between results of field samples and field replicate samples. Eleven field replicate samples were collected from the following influent samples:

- MB-INF-20200424
- LH-INF-20200424
- LH-INF 20200512

- LH-INF-20200526
- LH-INF-20200609
- LH-INF-20200630
- MB-INF-20200724
- LH-INF-20200730
- MB-INF-20200813
- LH-INF-20200827
- MB-INF-20200917

Relative percent differences and absolute differences calculated for the primary and replicate samples were within data quality objectives, so no data qualifiers were applied. Field replicate precision calculations for all detected compounds in the sample pair are summarized in **Table E-2**.

SUMMARY

The analytical data were determined to be usable for the purposes of this pilot study. The data usability process resulted in qualification of 0.052% of the concentrations within the dataset. Qualified analytical data are presented in **Table E-3** with the associated data qualifiers. Qualifiers have been incorporated into the summary data tables that are provided following the report text.

Table E-1: Field and Lab Sample ID
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
MB-INF-20200424	202004200247	4/24/2020	866700
MB-INF-DUP-20200424	202004200249		
LH-INF-20200424	202004200254		
LH-INF-DUP-20200424	202004200255		
FB-1-HOLD-20200424	202004200260		
GAC-1-20200505	202005050712	5/5/2020	869296
GAC-2-20200505	202005050713		
GAC-3-20200505	202005050714		
GAC-4-20200505	202005050715		
IX-1-20200505	202005050716		
IX-2-20200505	202005050717		
IX-3-20200505	202005050718		
IX-4-20200505	202005050719		
LH-INF-20200505	202005050720		
GAC-5-20200505	202005050721		
GAC-6-20200505	202005050722		
GAC-7-20200505	202005050723		
GAC-8-20200505	202005050724		
IX-5-20200505	202005050725		
IX-6-20200505	202005050726		
IX-7-20200505	202005050727		
IX-8-20200505	202005050728		
MB-INF--20200505	202005050729		
MB-INF-DUP-20200505	202005050730		
FB-HOLD-20200505	202005050731		
GAC-5-20200506	202005060507	5/6/2020	869571
GAC-6-20200506	202005060508		
GAC-7-20200506	202005060509		
GAC-8-20200506	202005060510		
IX-5-20200506	202005060511		
IX-6-20200506	202005060512		
IX-7-20200506	202005060513		
IX-8-20200506	202005060514		
MB-INF-20200506	202005060515		
GAC-1-20200512	202005120500	5/12/2020	870644
GAC-2-20200512	202005120501		
GAC-3-20200512	202005120502		
GAC-4-20200512	202005120503		
IX-1-20200512	202005120504		
IX-2-20200512	202005120505		
IX-3-20200512	202005120506		
IX-4-20200512	202005120507		
LH-INF 20200512	202005120508		
LH-INF-DUP-20200512	202005120509		
GAC-5-20200512	202005120510		
GAC-6-20200512	202005120511		
GAC-7-20200512	202005120512		
GAC-8-20200512	202005120513		
IX-5-20200512	202005120514		

Table E-1: Field and Lab Sample ID
PFAS Treatment Pilot Study
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-6-20200512	202005120515	5/12/2020	870644
IX-7-20200512	202005120516		
IX-8-20200512	202005120517		
MB-INF-20200512	202005120518		
FB-20200512	202005120519		
GAC-1-20200519	202005190374	5/19/2020	871876
GAC-2-20200519	202005190375		
GAC-3-20200519	202005190376		
GAC-4-20200519	202005190377		
IX-1-20200519	202005190378		
IX-2-20200519	202005190379		
IX-3-20200519	202005190380		
IX-4-20200519	202005190381		
LH-INF-20200519	202005190382		
GAC-5-20200519	202005190383		
GAC-6-20200519	202005190384		
GAC-7-20200519	202005190385		
GAC-8-20200519	202005190386		
IX-5-20200519	202005190387		
IX-6-20200519	202005190388		
IX-7-20200519	202005190389		
IX-8-20200519	202005190390		
MB-INF-20200519	202005190391		
FB-20200519	202005190392		
GAC-1-20200526	202005260418		
GAC-2-20200526	202005260431		
GAC-3-20200526	202005260432		
GAC-4-20200526	202005260433		
IX-1-20200526	202005260434		
IX-2-20200526	202005260435		
IX-3-20200526	202005260436		
IX-4-20200526	202005260437		
LH-INF-20200526	202005260438		
LH-INF-DUP-20200526	202005260439		
GAC-5-20200526	202005260440		
GAC-6-20200526	202005260441		
GAC-7-20200526	202005260442		
GAC-8-20200526	202005260443		
IX-5-20200526	202005260444		
IX-6-20200526	202005260445		
IX-7-20200526	202005260446		
IX-8-20200526	202005260447		
MB-INF-20200526	202005260448		
Field Blank - Hold	202005260460		
GAC-1-20200602	202006020423	6/2/2020	874079
GAC-2-20200602	202006020424		
GAC-3-20200602	202006020425		
GAC-4-20200602	202006020426		
IX-1-20200602	202006020427		

Table E-1: Field and Lab Sample ID
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-2-20200602	202006020428	6/2/2020	874079
IX-3-20200602	202006020429		
IX-4-20200602	202006020430		
LH-INF-20200602	202006020431		
GAC-5-20200602	202006020432		
GAC-6-20200602	202006020433		
GAC-7-20200602	202006020434		
GAC-8-20200602	202006020435		
IX-5-20200602	202006020436		
IX-6-20200602	202006020437		
IX-7-20200602	202006020438		
IX-8-20200602	202006020439		
MB-INF-20200602	202006020440		
FB-20200602	202006020441		
GAC-1-20200609	202006090542	6/9/2020	875389
GAC-2-20200609	202006090558		
GAC-3-20200609	202006090559		
GAC-4-20200609	202006090560		
IX-1-20200609	202006090561		
IX-2-20200609	202006090562		
IX-3-20200609	202006090563		
IX-4-20200609	202006090564		
LH-INF-20200609	202006090565		
LH-INF-DUP-20200609	202006090566		
GAC-5-20200609	202006090567		
GAC-6-20200609	202006090568		
GAC-7-20200609	202006090569		
GAC-8-20200609	202006090570		
IX-5-20200609	202006090571		
IX-6-20200609	202006090572		
IX-7-20200609	202006090573		
IX-8-20200609	202006090574		
MB-INF-20200609	202006090575		
FB-20200609	202006090576		
GAC-5-20200616	202006160319	6/16/2020	876642
GAC-6-20200616	202006160320		
GAC-7-20200616	202006160322		
GAC-8-20200616	202006160323		
IX-5-20200616	202006160324		
IX-6-20200616	202006160325		
IX-7-20200616	202006160326		
IX-8-20200616	202006160327		
MB-INF-20200616	202006160329		
FB-HOLD	202006160330		
GAC-5-20200623	202006230605	6/23/2020	877883
GAC-6-20200623	202006230606		
GAC-7-20200623	202006230607		
GAC-8-20200623	202006230608		
IX-5-20200623	202006230609		

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Field Sample ID	Lab Sample ID	Collection Date	Lab Report		
IX-6-20200623	202006230610	6/23/2020	877883		
IX-7-20200623	202006230611				
IX-8-20200623	202006230612				
MB-INF-20200623	202006230613				
GAC-1M-20200630	202006300488	6/30/2020	878992		
GAC-2M-20200630	202006300489				
GAC-3M-20200630	202006300490				
GAC-4M-20200630	202006300491				
IX-1M-20200630	202006300492				
IX-2M-20200630	202006300493				
IX-3M-20200630	202006300494				
IX-4M-20200630	202006300495				
LH-INF-20200630	202006300497				
LH-INF-DUP-20200630	202006300498				
GAC-5M-20200630	202006300499				
GAC-6M-20200630	202006300500				
GAC-7M-20200630	202006300501				
GAC-8M-20200630	202006300502				
IX-5M-20200630	202006300503				
IX-6M-20200630	202006300504				
IX-7M-20200630	202006300505				
IX-8M-20200630	202006300506				
MB-INF-20200630	202006300510				
FB - 20200630	202006300511				
GAC-1-20200707	202007070502	7/7/2020	879945		
GAC-2-20200707	202007070503				
GAC-3-20200707	202007070504				
GAC-4-20200707	202007070505				
IX-1-20200707	202007070506				
IX-2-20200707	202007070507				
IX-3-20200707	202007070508				
IX-4-20200707	202007070509				
LH-INF-20200707	202007070511				
GAC-5-20200707	202007070512				
GAC-6-20200707	202007070513				
GAC-7-20200707	202007070514				
GAC-8-20200707	202007070515				
IX-5-20200707	202007070516				
IX-6-20200707	202007070517				
IX-7-20200707	202007070518				
IX-8-20200707	202007070519				
MB-INF-20200707	202007070520				
GAC-1-20200715	202007150536			7/15/2020	881682
GAC-2-20200715	202007150537				
GAC-3-20200715	202007150538				
GAC-4-20200715	202007150539				
IX-1-20200715	202007150540				
IX-2-20200715	202007150541				
IX-3-20200715	202007150542				

Table E-1: Field and Lab Sample ID
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-4-20200715	202007150543	7/15/2020	881682
LH-INF-20200715	202007150544		
GAC-5-20200715	202007150545		
GAC-6-20200715	202007150546		
GAC-7-20200715	202007150547		
GAC-8-20200715	202007150548		
IX-5-20200715	202007150549		
IX-6-20200715	202007150550		
IX-7-20200715	202007150551		
IX-8-20200715	202007150552		
MB-INF-20200715	202007150554	7/24/2020	883523
GAC-1-20200724	202007240318		
GAC-2-20200724	202007240319		
GAC-3-20200724	202007240320		
GAC-4-20200724	202007240321		
IX-1-20200724	202007240322		
IX-2-20200724	202007240324		
IX-3-20200724	202007240325		
IX-4-20200724	202007240326		
LH-INF-20200724	202007240327		
GAC-5-20200724	202007240328		
GAC-6-20200724	202007240329		
GAC-7-20200724	202007240330		
GAC-8-20200724	202007240331		
IX-5-20200724	202007240332		
IX-6-20200724	202007240333		
IX-7-20200724	202007240334		
IX-8-20200724	202007240335		
MB-INF-20200724	202007240336		
MB-INF-DUP-20200724	202007240337		
FB-HOLD-20200724	202007240340	7/30/2020	884399
GAC-1M-20200730	202007300278		
GAC-2M-20200730	202007300279		
GAC-3M-20200730	202007300280		
GAC-4M-20200730	202007300281		
IX-1M-20200730	202007300282		
IX-2M-20200730	202007300283		
IX-3M-20200730	202007300284		
IX-4M-20200730	202007300285		
LH-INF-20200730	202007300286		
LH-INF-DUP-20200730	202007300287		
GAC-5M-20200730	202007300288		
GAC-6M-20200730	202007300289		
GAC-7M-20200730	202007300290		
GAC-8M-20200730	202007300291		
IX-5M-20200730	202007300292		
IX-6M-20200730	202007300293		
IX-7M-20200730	202007300294		
IX-8M-20200730	202007300295		

Table E-1: Field and Lab Sample ID
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
MB-INF-20200730	202007300296	7/30/2020	884399
FB-20200730	202007300297		
LH-EFF-20200730	202007300298		
MB-EFF-20200730	202007300299		
GAC-1-20200806	202008060350	8/6/2020	885690
GAC-2-20200806	202008060351		
GAC-3-20200806	202008060352		
GAC-4-20200806	202008060353		
IX-1-20200806	202008060354		
IX-2-20200806	202008060355		
IX-3-20200806	202008060356		
IX-4-20200806	202008060357		
LH-INF-20200806	202008060359		
GAC-5-20200806	202008060360		
GAC-6-20200806	202008060361		
GAC-7-20200806	202008060362		
GAC-8-20200806	202008060363		
IX-5-20200806	202008060364		
IX-6-20200806	202008060365		
IX-7-20200806	202008060366		
IX-8-20200806	202008060367		
MB-INF-20200806	202008060368	8/13/2020	887122
FB-HOLD-20200806	202008060369		
GAC-1-20200813	202008130373		
GAC-2-20200813	202008130374		
GAC-3-20200813	202008130375		
GAC-4-20200813	202008130376		
IX-1-20200813	202008130377		
IX-2-20200813	202008130378		
IX-3-20200813	202008130379		
IX-4-20200813	202008130380		
LH-INF-20200813	202008130382		
GAC-5-20200813	202008130383		
GAC-6-20200813	202008130384		
GAC-7-20200813	202008130385		
GAC-8-20200813	202008130386		
IX-5-20200813	202008130387		
IX-6-20200813	202008130388		
IX-7-20200813	202008130389		
IX-8-20200813	202008130390	8/20/2020	888431
MB-INF-20200813	202008130391		
MB-INF-DUP-20200813	202008130392		
FB-HOLD-20200813	202008130393		
GAC-1-20200820	202008200210		
GAC-2-20200820	202008200211		
GAC-3-20200820	202008200212		
GAC-4-20200820	202008200213		
IX-1-20200820	202008200214		
IX-2-20200820	202008200215		

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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-3-20200820	202008200216	8/20/2020	888431
IX-4-20200820	202008200217		
LH-INF-20200820	202008200220		
GAC-5-20200820	202008200228		
GAC-6-20200820	202008200229		
GAC-7-20200820	202008200230		
GAC-8-20200820	202008200231		
IX-5-20200820	202008200232		
IX-6-20200820	202008200233		
IX-7-20200820	202008200234		
IX-8-20200820	202008200235		
MB-INF-20200820	202008200236		
FB-HOLD-20200820	202008200237		
GAC-1M-20200827	202008270372		
GAC-2M-20200827	202008270373		
GAC-3M-20200827	202008270374		
GAC-4M-20200827	202008270375		
IX-1M-20200827	202008270376		
IX-2M-20200827	202008270377		
IX-3M-20200827	202008270378		
IX-4M-20200827	202008270379		
LH-INF-20200827	202008270380		
LH-INF-DUP-20200827	202008270381		
GAC-5M-20200827	202008270382		
GAC-6M-20200827	202008270383		
GAC-7M-20200827	202008270384		
GAC-8M-20200827	202008270385		
IX-5M-20200827	202008270386		
IX-6M-20200827	202008270387		
IX-7M-20200827	202008270388		
IX-8M-20200827	202008270389		
MB-INF-20200827	202008270392		
FB-HOLD-20200827	202008270395		
GAC-1-20200903	202009030436	9/3/2020	890914
GAC-2-20200903	202009030437		
GAC-3-20200903	202009030438		
GAC-4-20200903	202009030439		
IX-1-20200903	202009030440		
IX-2-20200903	202009030441		
IX-3-20200903	202009030442		
IX-4-20200903	202009030443		
LH-INF-20200903	202009030444		
GAC-5-20200903	202009030445		
GAC-6-20200903	202009030446		
GAC-7-20200903	202009030447		
GAC-8-20200903	202009030448		
IX-5-20200903	202009030449		
IX-6-20200903	202009030450		
IX-7-20200903	202009030451		

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Field Sample ID	Lab Sample ID	Collection Date	Lab Report		
IX-8-20200903	202009030452	9/3/2020	890914		
MB-INF-20200903	202009030453				
MB-INF-20200903 MS	202009030454				
MB-INF-20200903 MSD	202009030455				
LH-INF-20200903 MS	202009030456				
LH-INF-20200903 MSD	202009030457				
GAC-1-20200910	202009100507	9/10/2020	891987		
GAC-2-20200910	202009100508				
GAC-3-20200910	202009100509				
GAC-4-20200910	202009100510				
IX-1-20200910	202009100511				
IX-2-20200910	202009100512				
IX-3-20200910	202009100513				
IX-4-20200910	202009100514				
LH-INF-20200910	202009100515				
GAC-5-20200910	202009100516				
GAC-6-20200910	202009100517				
GAC-7-20200910	202009100518				
GAC-8-20200910	202009100519				
IX-5-20200910	202009100520				
IX-6-20200910	202009100521				
IX-7-20200910	202009100522				
IX-8-20200910	202009100523				
MB-INF-20200910	202009100524				
GAC-1-20200917	202009170160			9/17/2020	893261
GAC-2-20200917	202009170161				
GAC-3-20200917	202009170162				
GAC-4-20200917	202009170163				
IX-1-20200917	202009170164				
IX-2-20200917	202009170165				
IX-3-20200917	202009170166				
IX-4-20200917	202009170167				
LH-INF-20200917	202009170169				
GAC-5-20200917	202009170171				
GAC-6-20200917	202009170172				
GAC-7-20200917	202009170173				
GAC-8-20200917	202009170174				
IX-5-20200917	202009170175				
IX-6-20200917	202009170176				
IX-7-20200917	202009170177				
IX-8-20200917	202009170178				
MB-INF-20200917	202009170179				
MB-INF-DUP-20200917	202009170180				
FB - 20200917 - HOLD	202009170181				
GAC-1M-20200924	202009240155	9/24/2020	894497		
GAC-2M-20200924	202009240156				
GAC-3M-20200924	202009240157				
GAC-4M-20200924	202009240158				
IX-1M-20200924	202009240159				

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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-2M-20200924	202009240160	9/24/2020	894497
IX-3M-20200924	202009240161		
IX-4M-20200924	202009240162		
GAC-5M-20200924	202009240163		
GAC-6M-20200924	202009240164		
GAC-7M-20200924	202009240165		
GAC-8M-20200924	202009240166		
IX-5M-20200924	202009240167		
IX-6M-20200924	202009240168		
IX-7M-20200924	202009240169		
IX-8M-20200924	202009240170		
GAC-1-20201001	202010010380	10/1/2020	895705
GAC-2-20201001	202010010381		
GAC-3-20201001	202010010382		
GAC-4-20201001	202010010383		
IX-1-20201001	202010010384		
IX-2-20201001	202010010385		
IX-3-20201001	202010010386		
IX-4-20201001	202010010387		
GAC-5-20201001	202010010388		
GAC-6-20201001	202010010389		
GAC-7-20201001	202010010390		
GAC-8-20201001	202010010391		
IX-5-20201001	202010010392		
IX-6-20201001	202010010393		
IX-7-20201001	202010010394		
IX-8-20201001	202010010395		
GAC-1-20201008	202010080580		
GAC-2-20201008	202010080581		
GAC-3-20201008	202010080582		
GAC-4-20201008	202010080583		
IX-1-20201008	202010080584		
IX-2-20201008	202010080585		
IX-3-20201008	202010080586		
IX-4-20201008	202010080587		
GAC-5-20201008	202010080588		
GAC-6-20201008	202010080589		
GAC-7-20201008	202010080590		
GAC-8-20201008	202010080591		
IX-5-20201008	202010080592		
IX-6-20201008	202010080593		
IX-7-20201008	202010080594		
IX-8-20201008	202010080595		
GAC-1-20201015	202010150620	10/15/2020	898631
GAC-2-20201015	202010150621		
GAC-3-20201015	202010150622		
GAC-4-20201015	202010150623		
IX-1-20201015	202010150624		
IX-2-20201015	202010150625		

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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-3-20201015	202010150626	10/15/2020	898631
IX-4-20201015	202010150627		
LH-INF-20201015	202010150628		
GAC-5-20201015	202010150629		
GAC-6-20201015	202010150630		
GAC-7-20201015	202010150631		
GAC-8-20201015	202010150632		
IX-5M-20201015	202010150633		
IX-6M-20201015	202010150634		
IX-7M-20201015	202010150635		
IX-8M-20201015	202010150636		
GAC-1M-20201015	202010150695		
GAC-2M-20201015	202010150696		
GAC-3M-20201015	202010150697		
GAC-4M-20201015	202010150698		
IX-1M-20201015	202010150699		
IX-2M-20201015	202010150700		
IX-3M-20201015	202010150701		
IX-4M-20201015	202010150702		
GAC-5M-20201015	202010150703		
GAC-6M-20201015	202010150704		
GAC-7M-20201015	202010150705		
GAC-8M-20201015	202010150706		
IX-5-20201015	202010150707		
IX-6-20201015	202010150708		
IX-7-20201015	202010150709		
IX-8-20201015	202010150710		
MB-INF-20201015	202010150711		
GAC-1-20201022	202010220303		
GAC-2-20201022	202010220304		
GAC-3-20201022	202010220305		
GAC-4-20201022	202010220306		
IX-1-20201022	202010220307		
IX-2-20201022	202010220308		
IX-3-20201022	202010220309		
IX-4-20201022	202010220310		
GAC-5-20201022	202010220311		
GAC-6-20201022	202010220312		
GAC-7-20201022	202010220313		
GAC-8-20201022	202010220314		
IX-5-20201022	202010220315		
IX-6-20201022	202010220316		
IX-7-20201022	202010220317		
IX-8-20201022	202010220318	11/5/2020	902203
GAC-1 - 20201105	202011050476		
GAC-2 - 20201105	202011050477		
GAC-3 - 20201105	202011050478		
GAC-4 - 20201105	202011050479		
IX-1 - 20201105	202011050480		

Table E-1: Field and Lab Sample ID
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-2 - 20201105	202011050481	11/5/2020	902203
IX-3 - 20201105	202011050482		
IX-4 - 20201105	202011050483		
GAC-5 - 20201105	202011050514		
GAC-6 - 20201105	202011050515		
GAC-7 - 20201105	202011050516		
GAC-8 - 20201105	202011050517		
IX-5 - 20201105	202011050518		
IX-6 - 20201105	202011050519		
IX-7 - 20201105	202011050520		
IX-8 - 20201105	202011050521		
GAC-1-20201119	202011190346		
GAC-2-20201119	202011190347		
GAC-3-20201119	202011190348		
GAC-4-20201119	202011190349		
IX-1-20201119	202011190350		
IX-2-20201119	202011190351		
IX-3-20201119	202011190352		
IX-4-20201119	202011190353		
GAC-1M-20201119	202011190355		
GAC-2M-20201119	202011190356		
GAC-3M-20201119	202011190357		
GAC-4M-20201119	202011190358		
IX-1M-20201119	202011190359		
IX-2M-20201119	202011190360		
IX-3M--20201119	202011190361		
IX-4M-20201119	202011190362		
IX-5-20201119	202011190364		
IX-6-20201119	202011190365		
IX-7-20201119	202011190366		
IX-8-20201119	202011190367		
GAC-5--20201119	202011190368		
GAC-6--20201119	202011190369		
GAC-7-20201119	202011190370		
GAC-8-20201119	202011190371		
IX-5M-20201119	202011190372		
IX-6M-20201119	202011190373		
IX-7M-20201119	202011190374		
IX-8M-20201119	202011190375		
GAC-5M-20201119	202011190376		
GAC-6M-20201119	202011190377		
GAC-7M-20201119	202011190378		
GAC-8M-20201119	202011190379		
LH-INF-20201119	202011190339		
MB-INF-20201119	202011190340		
GAC-1-20201204	202012040189	12/4/2020	906889
GAC-2-20201204	202012040190		
GAC-3-20201204	202012040191		
GAC-4-20201204	202012040192		

Table E-1: Field and Lab Sample ID
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-1-20201204	202012040193	12/4/2020	906889
IX-2-20201204	202012040194		
IX-3-20201204	202012040195		
IX-4-20201204	202012040196		
GAC-5-20201204	202012040197		
GAC-6-20201204	202012040198		
GAC-7-20201204	202012040201		
GAC-8-20201204	202012040202		
IX-5-20201204	202012040203		
IX-6-20201204	202012040204		
IX-7-20201204	202012040205		
IX-8-20201204	202012040206		
IX-5-20201217	202012170402		
IX-6-20201217	202012170403		
IX-7-20201217	202012170404		
IX-8-20201217	202012170405		
GAC-5-20201217	202012170406		
GAC-6-20201217	202012170407		
GAC-7-20201217	202012170408		
GAC-8-20201217	202012170409		
IX-5M-20201217	202012170410		
IX-6M-20201217	202012170411		
IX-7M-20201217	202012170412		
IX-8M-20201217	202012170413		
GAC-5M-20201217	202012170414		
GAC-6M-20201217	202012170415		
GAC-7M-20201217	202012170416		
GAC-8M-20201217	202012170417		
MB-INF-20201217	202012170418		
GAC-5-20210107	202101070382	1/7/2021	911833
GAC-6-20210107	202101070383		
GAC-7-20210107	202101070384		
GAC-8-20210107	202101070385		
IX-5-20210107	202101070386		
IX-7-20210107	202101070388		
IX-8-20210107	202101070389		
MB-INF-20210107	202101070390		
GAC-1-20210127	202101270689	1/27/2021	915470
GAC-2-20210127	202101270690		
GAC-3-20210127	202101270691		
GAC-4-20210127	202101270692		
IX-1-20210127	202101270694		
IX-2-20210127	202101270695		
IX-3-20210127	202101270696		
IX-4-20210127	202101270697		
GAC-1M-20210127	202101270698		
GAC-2M-20210127	202101270699		
GAC-3M-20210127	202101270700		
GAC-4M-20210127	202101270701		

Table E-1: Field and Lab Sample ID
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-1M-20210127	202101270702	1/27/2021	915470
IX-2M-20210127	202101270703		
IX-3M-20210127	202101270704		
IX-4M-20210127	202101270705		
IX-5-20210127	202101270711		
IX-6-20210127	202101270712		
IX-7-20210127	202101270713		
IX-8-20210127	202101270714		
GAC-5-20210127	202101270715		
GAC-6-20210127	202101270716		
GAC-7-20210127	202101270717		
GAC-8-20210127	202101270718		
GAC-1-20210224	202102240313		
GAC-2-20210224	202102240314		
GAC-3-20210224	202102240315		
GAC-4-20210224	202102240316		
IX-1-20210224	202102240317		
IX-2-20210224	202102240318		
IX-3-20210224	202102240319		
IX-4-20210224	202102240320		
LH-INF-20210224	202102240321		
IX-5-20210224	202102240322		
IX-6-20210224	202102240323		
IX-7-20210224	202102240324		
IX-8-20210224	202102240325		
GAC-5-20210224	202102240326		
GAC-6-20210224	202102240328		
GAC-7-20210224	202102240329		
GAC-8-20210224	202102240330		
MB-INF-20210224	202102240331		
GAC-1-20210325	202103250304	3/25/2021	925810
GAC-2-20210325	202103250305		
GAC-3-20210325	202103250306		
GAC-4-20210325	202103250307		
IX-1--20210325	202103250308		
IX-2-20210325	202103250309		
IX-3-20210325	202103250310		
IX-4-20210325	202103250311		
GAC-1M-20210325	202103250312		
GAC-2M-20210325	202103250313		
GAC-3M-20210325	202103250314		
GAC-4M-20210325	202103250315		
IX-1M-20210325	202103250316		
IX-2M-20210325	202103250317		
IX-3M-20210325	202103250318		
IX-4M-20210325	202103250319		
IX-5-20210325	202103250321		
IX-6-20210325	202103250322		
IX-7-20210325	202103250323		

Table E-1: Field and Lab Sample ID
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
IX-8-20210325	202103250324	3/25/2021	925810
GAC-5-20210325	202103250325		
GAC-6-20210325	202103250326		
GAC-7-20210325	202103250327		
GAC-8-20210325	202103250328		
IX-5M-20210325	202103250329		
IX-6M-20210325	202103250330		
IX-7M-20210325	202103250331		
IX-8M-20210325	202103250332		
GAC-5M-20210325	202103250333		
GAC-6M-20210325	202103250334		
GAC-7M-20210325	202103250335		
GAC-8M-20210325	202103250336		
GAC-1-20210422	202104220331		
GAC-2-20210422	202104220332		
GAC-3-20210422	202104220333		
GAC-4-20210422	202104220334		
IX-1-20210422	202104220335		
IX-2-20210422	202104220337		
IX-3-20210422	202104220338		
IX-4-20210422	202104220339		
LH-INF-20210422	202104220340		
GAC-5-20210422	202104220341		
GAC-6-20210422	202104220342		
GAC-7-20210422	202104220343		
GAC-8-20210422	202104220344		
IX-5-20210422	202104220345		
IX-6-20210422	202104220346		
IX-7-20210422	202104220347		
IX-8-20210422	202104220348		
MB-INF-20210422	202104220351		
GAC-1-20210520	202105200575	5/20/2021	936465
GAC-2-20210520	202105200576		
GAC-3-20210520	202105200577		
GAC-4-20210520	202105200578		
IX-1-20210520	202105200579		
IX-2-20210520	202105200580		
IX-3-20210520	202105200581		
IX-4-20210520	202105200582		
GAC-1M-20210520	202105200583		
GAC-2M-20210520	202105200584		
GAC-3M-20210520	202105200585		
GAC-4M-20210520	202105200586		
IX-1M-20210520	202105200587		
IX-2M-20210520	202105200588		
IX-3M-20210520	202105200589		
IX-4M-20210520	202105200590		
GAC-1-20210603	202106030307	6/3/2021	938766
GAC-2-20210603	202106030308		

Table E-1: Field and Lab Sample ID
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Field Sample ID	Lab Sample ID	Collection Date	Lab Report
GAC-3-20210603	202106030309	6/3/2021	938766
GAC-4-20210603	202106030310		
IX-1-20210603	202106030311		
IX-2-20210603	202106030312		
IX-3-20210603	202106030313		
IX-4-20210603	202106030314		
LH-INF-20210603	202106030315		
LH-INF-20210603	202106030317	6/3/2021	938769
GAC-1-20210621	202106210622	6/21/2021	941985
GAC-2-20210621	202106210623		
GAC-3-20210621	202106210624		
GAC-4-20210621	202106210625		
IX-1-20210621	202106210626		
IX-2-20210621	202106210627		
IX-3-20210621	202106210628		
IX-4-20210621	202106210629		
GAC-1M-20210621	202106210630		
GAC-2M-20210621	202106210631		
GAC-3M-20210621	202106210632		
GAC-4M-20210621	202106210633		
IX-1M-20210621	202106210634		
IX-2M-20210621	202106210635		
IX-3M-20210621	202106210636		
IX-4M-20210621	202106210637		
LH-INF-20210621	202106210638		

Table E-2: Field Precision for Detected PFAS Analytes
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Sample ID	Replicate Sample ID	Sample Date	Laboratory Report	Sample Description	Analyte	Sample Result (ppt)	Duplicate Result (ppt)	RPD (%)	RPD Result	Reporting Limit Comparison
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFOA	15	15	0.0	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFOS	39	40	2.5	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFHxS	6.8	7.2	5.7	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFBS	8.0	7.7	3.8	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFHxA	3.8	3.6	5.4	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFHpA	2.6	2.6	0.0	A	--
MB-INF-20200424	MB-INF-DUP-20200424	4/4/2020	866700	Influent	PFNA	3.3	3.7	11.4	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFOA	12	12	0.0	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFOS	32	32	0.0	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFHxS	6.3	6.9	9.1	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFBS	6	5.9	1.7	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFHxA	2.8	2.7	3.6	A	--
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200424	LH-INF-DUP-20200424	4/4/2020	866700	Influent	PFNA	3	2.9	3.4	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFOA	13	12	8.0	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFOS	34	33	3.0	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFHxS	6.6	6.6	0.0	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFBS	5.8	5.9	1.7	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFHxA	3	2.9	3.4	A	--
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF 20200512	LH-INF-DUP-20200512	5/12/2020	870644	Influent	PFNA	3.1	2.9	6.7	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFOA	12	12	0.0	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFOS	32	31	3.2	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFHxS	6.2	6.2	0.0	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFBS	5.9	5.6	5.2	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFHxA	3.1	3.2	3.2	A	--
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200526	LH-INF-DUP-20200526	5/26/2020	872940	Influent	PFNA	3.3	3.3	0.0	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFOA	12	12	0.0	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFOS	30	30	0.0	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFHxS	6.4	6	6.5	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFBS	5.3	5.3	0.0	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFHxA	2.6	2.5	3.9	A	--
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200609	LH-INF-DUP-20200609	6/9/2020	875389	Influent	PFNA	3.0	3.0	0.0	A	--

Table E-2: Field Precision for Detected PFAS Analytes
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Sample ID	Replicate Sample ID	Sample Date	Laboratory Report	Sample Description	Analyte	Sample Result (ppt)	Duplicate Result (ppt)	RPD (%)	RPD Result	Reporting Limit Comparison
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFOA	12	12	0.0	A	--
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFOS	30	31	3.3	A	--
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFHxS	6	6.3	4.9	A	--
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFBS	5.3	6	12.4	A	--
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFHxA	2.5	3.3	27.6	A	--
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200630	LH-INF-DUP-20200630	6/30/2020	878992	Influent	PFNA	3	2.9	3.4	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFOA	15	15	0.0	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFOS	35	36	2.8	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFHxS	6.4	6.4	0.0	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFBS	8.8	9	2.2	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFHxA	4.4	4.5	2.2	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFHpA	3.4	3.3	3.0	A	--
MB-INF-20200724	MB-INF-DUP-20200724	7/24/2020	883523	Influent	PFNA	3.6	3.5	2.8	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFOA	12	12	0.0	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFOS	31	30	3.3	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFHxS	6.1	5.9	3.3	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFBS	5.9	5.8	1.7	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFHxA	3	3	0.0	A	--
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200730	LH-INF-DUP-20200730	7/30/2020	883523	Influent	PFNA	3.1	3.2	3.2	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFOA	14	14	0.0	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFOS	34	34	0.0	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFHxS	6.1	6.3	3.2	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFBS	8.8	8.9	1.1	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFHxA	5.1	4.6	10.3	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFHpA	3.5	3.5	0.0	A	--
MB-INF-20200813	MB-INF-DUP-20200813	8/13/2020	887122	Influent	PFNA	3.8	3.9	2.6	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFOA	13	13	0.0	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFOS	33	32	3.1	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFHxS	6.4	6.3	1.6	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFBS	6.2	6.2	0.0	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFHxA	3.3	3.3	0.0	A	--
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFHpA	<2.0	<2.0	NA	--	A
LH-INF-20200827	LH-INF-DUP-20200827	8/27/2020	889747	Influent	PFNA	3.0	2.9	3.4	A	--

Table E-2: Field Precision for Detected PFAS Analytes
PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Sample ID	Replicate Sample ID	Sample Date	Laboratory Report	Sample Description	Analyte	Sample Result (ppt)	Duplicate Result (ppt)	RPD (%)	RPD Result	Reporting Limit Comparison
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFOA	16	16	0.0	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFOS	37	37	0.0	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFHxS	6.8	6.8	0.0	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFBS	9.8	9.8	0.0	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFHxA	6.0	6.1	1.7	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFHpA	4.4	4.2	4.7	A	--
MB-INF-20200917	MB-INF-DUP-20200917	9/17/2020	893261	Influent	PFNA	3.6	3.6	0.0	A	--

Notes:

1. The detection limit was used to calculate Relative Percent Difference (RPD) for non-detect samples and result is reported as ">" RPD%.
- 2.

$$RPD = \frac{|x_1 - x_2|}{\bar{x}} \times 100$$

Where:

RPD = relative percent difference

x_1 = analyte concentration in primary sample

x_2 = analyte concentration in duplicate sample

\bar{x} = average of x_1 and x_2

3. A = Acceptable RPD; J = Estimated concentration
4. Only results detected in both the primary and duplicate sample are presented.

Table E-3: Data Qualifier Summary
PFAS Treatment Pilot Study
 Water Replenishment District of Southern California

Report Number	Sample ID	Sample Date	Analyte	Lab Result	Units	Lab Qualifier	DUS Qualifier and Bias Code	Reason for Qualification	Batch Number
871876	MB-INF-20200519	5/19/2020	Perfluorodecanoic acid (PFDA)	<0.002	ug/L	S7	UJ	Surrogate recovery	1251781
871876	MB-INF-20200519	5/19/2020	Perfluorohexanoic acid (PFHxA)	<0.002	ug/L	S7	UJ	Surrogate recovery	1251781
925810	LH-INF-20210325	3/25/2021	Alkalinity in CaCO ₃ units	200	mg/L	H1	J	Analyzed outside holding time	1317659
925810	LH-INF-20210325	3/25/2021	Total Suspended Solids (TSS)	ND	mg/L	H1	UJ	Analyzed outside holding time	1318035
925810	MB-INF-20210325	3/25/2021	Alkalinity in CaCO ₃ units	160	mg/L	B7, H1	J	Analyzed outside holding time	1320930
925810	MB-INF-20210325	3/25/2021	Total Suspended Solids (TSS)	ND	mg/L	H1	UJ	Analyzed outside holding time	1318035
925810	LH-INF-20210325	3/25/2021	Arsenic Total ICAP/MS	2.6	mg/L	None	J	Detected in Method Blank	1316698
925810	MB-INF-20210325	3/25/2021	Arsenic Total ICAP/MS	1.4	mg/L	None	J	Detected in Method Blank	1316698

Notes:

1. RPD = Relative Percent Difference; %R = Percent Recovery
2. DUS Qualifier Codes: U = Not detected; J = Estimated, the analyte was detected and identified.
3. MS = matrix spike; MSD = matrix spike duplicate; MB = method blank; LCS = laboratory control sample; LCSD = laboratory control sample duplicate.