KINDER MORGAN
ENERGY PARTNERS, L.P.

SFPP, L.P.
Operating Partnership

May 14, 2021

California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013

Re: Effluent Monitoring Report
January through March 2021
SFPP, L.P. Norwalk Pump Station
15306 Norwalk Boulevard, Norwalk, California
(NPDES No. CA0063509, CI No. 7497)

Attention: Information Technology Unit

In reference to the subject National Pollutant Discharge Elimination System (NPDES) permit, please find enclosed the First Quarter 2021 Effluent Monitoring Report for the subject discharge.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on the 14th day of May 2021.
at 07:15 AM

Court Reece (signature)

Court Reece (printed name)

Remediation Supervisor (title)

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May 14, 2021

Attention: Mr. Court Reece
Kinder Morgan, Inc.
1001 Louisiana Street
Houston, Texas 77002

Subject: Effluent Monitoring Report, January 1 to March 31, 2021 (First Quarter 2021)
SFPP Norwalk Pump Station, 15306 Norwalk Boulevard, Norwalk, California
(NPDES No. CA0063509, CI No. 7497, Order No. R4-2016-0309)

Dear Mr. Reece,

This report summarizes National Pollutant Discharge Elimination System (NPDES) monitoring related to the discharge of treated groundwater from the Kinder Morgan, Inc. (Kinder Morgan) product recovery and groundwater extraction (GWE) system located at the SFPP, L.P. (SFPP) Norwalk Pump Station within the Defense Fuel Support Point Norwalk facility, at 15306 Norwalk Boulevard, Norwalk, California (the site; Figures 1 and 2).

This report describes NPDES monitoring activities during the period of January 1 to March 31, 2021. Kinder Morgan performed operation, maintenance, and monitoring tasks on the product recovery and GWE systems during this time. This report has been prepared based on NPDES monitoring conducted by Kinder Morgan.

Remediation Systems

Kinder Morgan operates remediation systems consisting of soil vapor extraction (SVE), total fluids extraction (TFE) of free product and/or groundwater using a top-loading pump, GWE using a bottom-loading pump, and treatment of extracted soil vapors and groundwater to address the south-central and southeastern areas of the site. Horizontal biosparging is also employed in the south-central and southeastern areas to enhance natural attenuation of hydrocarbon constituents, and soon will be implemented in the offsite/south-central area, as described below.

The remedial objectives are to contain and control the migration of hydrocarbon constituents in groundwater and soil vapor, and to remove hydrocarbon mass from soil and groundwater. The remediation system includes the following wells:

a) South-central area (currently inactive)
   - 13 TFE wells
   - 24 onsite SVE wells (most collocated with TFE wells)
   - 1 horizontal biosparge well (BS-01)

b) Offsite/south-central area
   - 7 TFE wells (offline as of February 23)
   - 6 offsite SVE wells (5 collocated with TFE wells)
   - 1 horizontal biosparge well (BS-03; not yet operative)
   - 1 horizontal SVE well (HSVE-01; not yet operative)

c) Southeastern area (24-inch block valve area)
   - 4 TFE wells (GM W-O-15, GMW-O-18, GMW-36, and GMW-SF-9) (offline as of February 23)
   - 1 GWE well (GMW-SF-10) (offline as of February 23)
   - 9 SVE wells (3 collocated with TFE wells)
   - 1 horizontal biosparge well (BS-02)

The remediation system well network is shown on Figure 2. A brief description of each system is provided in the sections that follow.

Groundwater Treatment System

Currently, the groundwater treatment system (GWTS) is used to manage free product and groundwater recovered from the offsite/south-central and southeastern parts of the area. Free product and groundwater recovered by pneumatically operated, top-loading total fluid pumps and bottom-loading groundwater pumps are piped to a dissolved air flotation oil-water separator (DAF/OWS). Free product, if any, from the DAF/OWS is collected in a storage tank and transported to an offsite location. Water from the OWS is gravity drained into a 300-gallon transfer tank. From the transfer tank, the water is then treated using liquid-phase granular activated carbon (LGAC). Treated water is routed through an onsite 3,000-gallon equalization tank. Two fluidized bed bioreactors installed downstream of the equalization tank treat fuel oxygenates such as tertiary butyl alcohol and methyl tertiary butyl ether. The treated groundwater then passes through polishing LGAC units prior to discharge to a storm drain that leads to Coyote Creek.

Discharge to Coyote Creek is performed in accordance with the NPDES permit (Permit Number [No.] CA0063509; Order No. R4-2016-0309), which was adopted on September 7, 2016, and became effective on November 1, 2016.

Currently, only the southeastern and offsite/south-central portions of the GWTS are active. The south-central portion was deactivated in May 2020 as part of the Natural Source Zone Depletion (NSZD) performance monitoring pilot study.

Soil Vapor Extraction System

SVE is performed using a blower to remove soil vapors from the south-central and southeastern areas of the site. The extracted vapors are conveyed to a knock-out tank that separates entrained moisture from the soil vapor. Accumulated moisture in the knock-out tank is treated by the main GWTS described above. The soil vapors are then treated in a regenerative thermal oxidizer (RTO) where volatile organic compounds (VOCs) are converted to carbon dioxide and water prior to being discharged to the atmosphere. Operation of the GWTS and SVE systems is conducted in accordance with Permits to Operate (Permit Nos. G46188 A/N 578779 and G46187 A/N 578777, respectively; ID 110835) issued by the South Coast Air Quality Management District.

The south-central SVE system remains offline as part of the NSZD performance monitoring pilot study. In May 2020, Kinder Morgan implemented the NSZD performance monitoring pilot study in the south-central and southeastern areas of the site, as described in the NSZD Work Plan (Jacobs, 2019), and approved by the California Regional Water Quality Control Board, Los Angeles Region (Water Board) in a letter dated April 8, 2020 (Water Board, 2020). The expanded southeastern SVE system was restarted on May 15, 2020; the well network includes wells VEW-3, VEW-4, PZ-5, GMW-O-16, GMW-O-19, and MW-8; and TFE/SVE wells GMW-O-15, GMW-O-18, and GMW-36. These wells connect to the RTO via a new, dedicated 1,200-foot-long, 6-inch high-density polyethylene (HDPE) header. The expanded southeastern SVE system is currently operating at a combined flow of 200 standard cubic feet per minute (scfm), under a vacuum pressure of 50 inches of water. In addition, there are four SVE wells currently operating in the offsite/south-central area, including GMW-O-11, GMW-O-12, GMW-O-20, and GMW-O-23.

A new horizontal SVE well (HSVE-01) was installed in the offsite/south-central area in December 2019 and is designed to extract vapors created from operating the new horizontal biosparge well BS-03 (described in the following section). Horizontal SVE well HSVE-01 is constructed of 6-inch-diameter Schedule 10 stainless-steel casing and screen and was completed to a depth of approximately 20 feet below ground surface (bgs). The length of the HSVE-01 screen is 500 feet, and the total length of the well is 745 feet. A construction completion report documenting construction activities and specifications was submitted to the Water Board in June 2020 (Jacobs, 2020). HSVE-01 is currently inoperative, and is scheduled to be turned on in April 2021. Prior to HSVE-01 startup, the four offsite/south-central SVE wells: GMW-O-11, GMW-O-12, GMW-O-20, and GMW-O-23 will be turned off as part of the HSVE-01 startup plan.

Horizontal Biosparge System

Biosparging involves injecting air into the aquifer to enhance in-situ biodegradation of VOCs present in free product and groundwater. Horizontal biosparge wells were installed in three locations at the site, as described below.

South-Central Area (currently inoperative): In December 2014, Kinder Morgan completed installation of a horizontal biosparge system in the south-central area of the site, which consists of a horizontal biosparge well (BS-01) and a 500-scfm compressor. To reduce the potential for off-gassing of VOCs while biosparging, the SVE system has an interlock that will not allow the biosparge to operate without the SVE system running. The biosparge well is constructed of 4-inch-diameter Schedule 80 polyvinyl chloride (PVC) casing and screen completed to a vertical depth of approximately 45 feet bgs. The lateral distance of the screen interval is 600 feet centered below the

central portion of the south-central area hydrocarbon plume. Further details regarding the construction of the biosparge well are documented in the report titled *Horizontal Biosparge Well and Soil Vapor Monitoring Probe Completion Report* (CH2M, 2015).

This well was operated from 2015 through May 2020, before being deactivated as part of the NSZD performance monitoring pilot study.

Southeastern Area (currently operative): A second horizontal biosparge well (BS-02) was installed in the southeastern area of the site in November 2017. The design of the second biosparge well is similar to BS-01, the south-central biosparge well, consisting of 4-inch-diameter Schedule 80 PVC casing and screen completed to a vertical depth of approximately 45 feet bgs. The lateral distance of the screen interval is 240 feet centered below the southeastern area hydrocarbon plume. A construction completion report documenting construction activities and specifications was submitted on July 12, 2018 (Jacobs, 2018). The 500-scfm sparge compressor was turned off temporarily and a new air sparge compressor (883 scfm) was installed in the fourth quarter 2018 to deliver ambient air to both the south-central and southeastern sparge wells. The 500-scfm and 883-scfm compressors are appropriately sized to deliver ambient air to both the south-central and southeastern sparge wells, and to allow for future system expansion.

Offsite/South-Central Area (currently inoperative): A new horizontal biosparge well (BS-03) was installed in the offsite/south-central area in December 2019. The biosparge well is constructed of 4-inch-diameter Schedule 80 PVC casing and screen, and completed to a depth of approximately 45 feet bgs. The length of the BS-03 well screen is 500 feet and the total length of the well is 770 feet. BS-03 is centered below the offsite/south-central area hydrocarbon plume. A construction completion report documenting construction activities and specifications was submitted to the Water Board in June 2020 (Jacobs, 2020).

BS-01 currently remains offline as part of the NSZD pilot study. BS-02 was turned on in May 2020 and is currently operating at a flow of 180 scfm. BS-03 is currently inoperative and is scheduled to be turned on second quarter 2021.

A summary of GWTS operations during the reporting period is presented in the sections that follow. Operations of the SVE and biosparge systems are presented separately in quarterly remediation progress reports that are provided to the Water Board and Norwalk Restoration Advisory Board.

Summary of Quarterly Groundwater Treatment System Operations

A total of 405,432 gallons of groundwater was extracted from the offsite/south-central area and southeastern area, treated, and discharged to Coyote Creek during the first quarter 2021. Wells that were in operation included GMW-O-20, GMW-O-21, GMW-O-23, and MW-O-2 in the offsite/south-central area, and GMW-O-15 GMW-O-18, and GMW-36 in the southeastern area. Table 1 summarizes the average daily flow rate during the reporting period. The GWTS operated throughout the quarter, with the following exceptions:

- From February 3 to 5, 2021, the GWTS was shut down due to a failure of the sump pump. The sump pump was repaired, and the GWTS was restarted on February 5, 2021.
- From February 12 to 17, 2021, the GWTS was operating but was not pumping due to operator error. The GWTS was returned to normal operations on February 17, 2021.

- On February 19, 2021, the GWTS was temporarily halted due to maintenance purposes in preparation for planned shutdown.
- From February 25, 2021, to current date, extraction into the GWTS was discontinued as part of the planned transition away from the pump and treat remediation. This was approved by the Waterboards in an email dated February 5, 2021. GWTS is still operating and recirculating water through the bioreactors, without extracting or discharging.
- On March 3, 2021, the GWTS discharged 1,160 gallons of recirculated (treated) water, for maintenance purposes. This discharge of treated water was considered by the Water Board to be part of the February 2021 discharge (Water Board, 2021).

No free product accumulated in the product holding tank of the GWTS during the first quarter of 2021.

Routine Effluent Monitoring

During the first quarter 2021, effluent water samples were collected pursuant to the Waste Discharge Requirements (WDRs) under Order No. R4-2016-0309. Samples were collected at the Order-designated monitoring point EFF-001 (Remediation System Effluent) for monthly and quarterly analyses.

Summary of Compliance Results

Monthly and Quarterly Sampling

Effluent daily flow rates are presented in Table 1. All daily flows were below the permit maximum discharge limit of 150,000 gallons per day. Analytical results for January and February 2021 effluent sampling events are summarized in Table 2. No samples were collected for the month of March, as the 1,160 gallons of discharge on March 2, 2021 was part of the volume extracted in February and held in a recirculation tank. The effluent samples (EFF-001) were collected after the secondary polishing LGAC vessel, prior to discharge into the storm drain at the site. The results were compared with the maximum daily and average monthly discharge limits under Order No. R4-2016-0309. As shown in Table 2, all discharge limits for the treatment system effluent were met during the reporting period. Laboratory analytical reports and chain-of-custody documents are included in Attachment A. The mass emission (in pounds per day) is calculated by multiplying the daily effluent flow measured during the day of the sampling event (in million gallons per day) by the concentration of the analyte (milligrams per liter) and the conversion factor of 8.34, as required by the discharge permit. If the analyte was not detected in the sample, the concentration used is half of the method detection limit. Table 2 summarizes laboratory analytical results. A data quality assurance/quality control evaluation conducted by Jacobs is included in Attachment B.

Under NPDES Order No. R4-2016-0306, a wet weather condition is present when the maximum daily flow in Coyote Creek is equal to or greater than 156 cubic feet per second (cfs) as measured at the Los Angeles County Department of Public Works flow gauge station F354-R, located at the bottom of the creek just above the Long Beach Water Reclamation Plant. The daily flow rate in Coyote Creek, which is based on data from the Los Angeles County Department of Public Works flow gauge station F354-R, is presented in Table 3. Based on these data, the first quarter 2021

sampling events (with maximum daily flows of 16.5 cfs) occurred during dry weather conditions, and, are therefore, compared to the dry weather discharge limits.

Waste Handling

On January 19, 2021, approximately 2,100 gallons of hazardous waste, flammable liquids, n.o.s. (well redevelopment water classified as gasoline) were removed from the site by Patriot Environmental Services of 508 East E Street, Unit A, Wilmington, California 90744. The waste was transported to World Oil Recycling, at 2000 N. Alameda Street, Compton, California 90222.

A copy of the waste manifest is included in Attachment C.

Harbor Toxics Total Maximum Daily Load Monitoring

Water and sediment chemistry monitoring and sampling for toxic pollutants in the Dominguez Channel and the Greater Los Angeles and Long Beach Harbor Waters total maximum daily load (TMDL) (also referred to as the Harbor Toxics TMDL) was conducted on January 25, 2021. This event was conducted during wet weather conditions. On February 25, 2021, extraction via the GWTS was discontinued as part of the NSZD performance monitoring pilot study, therefore no additional sampling events will be conducted until further notice.

The Harbor Toxics TMDL summaries for 2021 are presented in Tables 4 and 5. The samples were shipped to Eurofins Calscience in Irvine, California, for analysis. Samples were also analyzed by Eurofins Calscience, LLC, in Garden Grove, California. The samples were analyzed in accordance with current EPA methods or as specified in the WDRs for the site. The laboratory reports are included in Attachment A.

References

California Regional Water Quality Control Board, Los Angeles Region (Water Board). 2020. *Comments on the Biosparging Effectiveness Evaluation and Recommendations, South-Central Area (Report), 15306 Norwalk Boulevard, Norwalk (SLIC No. 0286A, DOD No. 16638).* April 8.

California Regional Water Quality Control Board, Los Angeles Region (Water Board). 2021. *Concurrence that February 2021 Compliance Analytical Data is Representative of the March 3, 2021 Discharge (email from Bronwyn Kelly to Eric Davis), SFPP Norwalk Pump Station, 15306 Norwalk Boulevard, Norwalk, California*. March 17.

CH2M HILL Engineers Inc. (CH2M, now Jacobs). 2015. *Horizontal Biosparge Well and Soil Vapor Monitoring Probe Completion Report, SFPP Norwalk Pump Station, 15306 Norwalk Boulevard, Norwalk, California.* February 18.

Jacobs Engineering Group Inc. (Jacobs). 2018. *Southeastern Horizontal Biosparge Well (BS-02) Completion Report, SFPP Norwalk Pump Station, 15306 Norwalk Boulevard, Norwalk, California.* July 12.

Jacobs Engineering Group Inc. (Jacobs). 2019. *Natural Source Zone Depletion Work Plan, SFPP Norwalk Pump Station, 15306 Norwalk Boulevard, Norwalk, California.* July 2.

Jacobs

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Jacobs Engineering Group Inc. (Jacobs). 2020. *Offsite South-Central Horizontal Biosparge and Soil Vapor Extraction Well Installation Completion Report, SFPP Norwalk Pump Station, 15306 Norwalk Boulevard, Norwalk, California.* June 26.

U.S. Environmental Protection Agency (EPA). 2002a. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition. EPA 821/R-02/013. October.

U.S. Environmental Protection Agency (EPA). 2010b. National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document. EPA 833-R-10-003. June.

Should you require any further information, please contact Nils Orliczky/Jacobs at (949) 224-7500.

Yours sincerely

Nils Orliczky
Environmental Engineer

Attachments:

Table 1 – Effluent Flow Rate Measurements, First Quarter 2021
Table 2 – NPDES Effluent Monitoring, First Quarter 2021
Table 3 – Maximum Daily Flow in Coyote Creek, First Quarter 2021
Table 4 – Harbor Toxics TMDL Water Chemistry Field Measurement Summary
Table 5 – Harbor Toxics TMDL Water Chemistry Analytical Summary

Figure 1 – Site Location Map
Figure 2 – Remediation System Layout

Attachment A – Laboratory Analytical Reports and Chain-of-Custody Documents
Attachment B – Data Quality Assurance/Quality Control
Attachment C – Waste Manifest

Tables

Table 1. Effluent Flow Rate Measurements, First Quarter 2021

SFPP Norwalk Pump Station, Norwalk, California

Date	Daily Flow Rate (gpd) (Maximum Daily Discharge Limit = 150,000 gpd[a])
01/01/21	12,292
01/02/21	11,820
01/03/21	12,108
01/04/21	11,976
01/05/21	11,796
01/06/21	11,152
01/07/21	12,244
01/08/21	11,852
01/09/21	11,948
01/10/21	13,976
01/11/21	12,684
01/12/21	12,172
01/13/21	10,836
01/14/21	10,596
01/15/21	6,696
01/16/21	9,232
01/17/21	9,452
01/18/21	10,276
01/19/21	10,204
01/20/21	8,680
01/21/21	10,528
01/22/21	9,828
01/23/21	10,108
01/24/21	10,084
01/25/21	9,328
01/26/21	9,712
01/27/21	7,972
01/28/21	8,544
01/29/21	5,084
01/30/21	5,708
01/31/21	7,772
02/01/21	8,060
02/02/21	7,476
02/03/21	5,012
02/04/21	0
02/05/21	4,420
02/06/21	6,088
02/07/21	5,172
02/08/21	6,012
02/09/21	5,380
02/10/21	5,504
02/11/21	5,968
02/12/21	1,828
02/13/21	544
02/14/21	0
02/15/21	0
02/16/21	0
02/17/21	4,472

Table 1. Effluent Flow Rate Measurements, First Quarter 2021

SFPP Norwalk Pump Station, Norwalk, California

Date	Daily Flow Rate (gpd) (Maximum Daily Discharge Limit = 150,000 gpd[a])
02/18/21	10,220
02/19/21	9,324
02/20/21	256
02/21/21	0
02/22/21	0
02/23/21	0
02/24/21	1,388
02/25/21	488
02/26/21	0
02/27/21	0
02/28/21	0
03/01/21	0
03/02/21	0
03/03/21	1,160
03/04/21	0
03/05/21	0
03/06/21	0
03/07/21	0
03/08/21	0
03/09/21	0
03/10/21	0
03/11/21	0
03/12/21	0
03/13/21	0
03/14/21	0
03/15/21	0
03/16/21	0
03/17/21	0
03/18/21	0
03/19/21	0
03/20/21	0
03/21/21	0
03/22/21	0
03/23/21	0
03/24/21	0
03/25/21	0
03/26/21	0
03/27/21	0
03/28/21	0
03/29/21	0
03/30/21	0
03/31/21	0

Notes:

[a] California Regional Water Quality Control Board Waste Discharge Requirements.

gpd = gallons per day

Table 2. NPDES Effluent Monitoring, First Quarter 2021

SFPP Norwalk Pump Station, Norwalk, California

Analyte	Sampling Frequency	Analytical Method	Units	MDL[a]	RL[a]	ML[b]	01/22/21	02/02/21	March-21	Discharge Limits[c]	
										Monthly Average	Daily Maximum
Flow	Daily	--	gpd	--	--	--	**9,828**	**7,476**	**1,060[e]**	--	**150,000**
TPH as Gasoline (C4-C12)	Monthly	EPA 8015B	µg/L	21	50	NE	<32[d]	<33[d]	--	--	--
TPH as Diesel (C13-C22)	Monthly	EPA 8015B	µg/L	15	25	NE	23 J	<15	--	--	--
TPH as Oil (C23+)	Monthly	EPA 8015B	µg/L	14	25	NE	**53**	**32**	--	--	--
Total TPH	Monthly	EPA 8015B	µg/L	21	100	NE	**76[f]**	**32 J[f]**	--	--	**100**
Total TPH	Monthly	Calculated	lb/day	0	0		**0.006229**	**0.001995**	--	--	**0.13**
Benzene	Monthly	EPA 8260B	µg/L	0.11	1.0	2.0	<0.11	<0.11	--	--	--
1,1-Dichloroethane	Monthly	EPA 8260B	µg/L	0.22	0.5	1.0	<0.22	<0.22	--	--	--
1,2-Dichloroethane	Monthly	EPA 8260B	µg/L	0.16	0.5	2.0	<0.16	<0.16	--	--	--
Ethylbenzene	Monthly	EPA 8260B	µg/L	0.11	1.0	2.0	<0.11	<0.11	--	--	--
Phenol	Monthly	EPA 8270C	µg/L	0.33	1	1	<0.33	<0.33 J[g]	--	--	--
Toluene	Monthly	EPA 8260B	µg/L	0.13	2.0	2.0	<0.13	<0.13	--	--	--
Methyl Tertiary Butyl Ether	Monthly	EPA 8260B	µg/L	0.44	1.0	NE	<0.44	<0.44	--	--	--
Tertiary Butyl Alcohol	Monthly	EPA 8260B	µg/L	2.8	5.0	NE	<2.8	<2.8 J[g]	--	--	--
Total Xylenes	Monthly	EPA 8260B	µg/L	1.5	2.0	NE	<1.5	<1.5	--	--	--
Copper (total recoverable) (dry weather)	Monthly	EPA 200.8	µg/L	0.26	0.5	0.5	<0.26	<0.26	--	**9.7**	**32**
Copper (total recoverable) (dry weather)	Monthly	Calculated	lb/day	--	--	--	**0.000011**	**0.000008**	--	**0.012**	**0.04**
Copper (total recoverable) (wet weather)	Monthly	EPA 200.8	µg/L	0.26	0.5	0.5	<0.26	<0.26	--	**8.3**	**27**
Copper (total recoverable) (wet weather)	Monthly	Calculated	lb/day	--	--	--	**0.000011**	**0.000008**	--	**0.010**	**0.034**
Lead (total recoverable) (wet weather)	Monthly	EPA 200.8	µg/L	0.13	0.5	0.5	<0.13	<0.13	--	**33**	**106**
Lead (total recoverable) (wet weather)	Monthly	Calculated	lb/day	--	--	--	**0.000005**	**0.000004**	--	**0.041**	**0.13**
Mercury (total recoverable)	Monthly	EPA 245.1	µg/L	0.018	0.05	0.2	<0.047[i]	<0.036[i]	--	**0.051**	**0.10**
Mercury (total recoverable)	Monthly	Calculated	lb/day	--	--	--	**0.000002**	**0.000001**	--	**0.000064**	**0.00013**
Zinc (total recoverable) (dry weather)	Monthly	EPA 200.8	µg/L	0.27	1.0	1.0	<0.27	**0.95 J**	--	**64**	**220**
Zinc (total recoverable) (dry weather)	Monthly	Calculated	lb/day	--	--	--	**0.000011**	**0.000059**	--	**0.080**	**0.28**
Zinc (total recoverable) (wet weather)	Monthly	EPA 200.8	µg/L	0.27	1.0	1.0	<0.27	**0.95 J**	--	**46**	**158**
Zinc (total recoverable) (wet weather)	Monthly	Calculated	lb/day	--	--	--	**0.000011**	**0.000059**	--	**0.058**	**0.2**
Biochemical Oxygen Demand	Quarterly	SM 5210B	mg/L	2	2	NE	<2	<1.5	--	**20**	**30**
Biochemical Oxygen Demand	Quarterly	Calculated	lb/day	--	--	--	**0.081966**	**0.046762**	--	**25**	**38**
Total Suspended Solids	Quarterly	SM 2540D	mg/L	5.0	5.0	NE	--	<5	--	**50**	**75**
Total Suspended Solids	Quarterly	Calculated	lb/day	--	--	--	--	**0.155875**	--	**63**	**94**
pH	Quarterly	Field Measurement	s.u.	0.1	0.1	NE	--	**6.8**	--	--	**6.5/8.5**
Oil and Grease	Quarterly	EPA 1664A	mg/L	0.57	4	NE	--	<0.57	--	**10**	**15**
Oil and Grease	Quarterly	Calculated	lb/day	--	--	--	--	**0.01777**	--	**13**	**19**
Ammonia Nitrogen (as N)	Quarterly	EPA 350.1	mg/L	0.067	0.2	NE	**0.081 J[h]**	**0.094 J[h]**	--	--	--
Settleable Solids	Quarterly	SM 2540F	mL/L/hr	0.086	0.086	NE	--	<0.086	--	**0.1**	**0.3**
Temperature	Quarterly	Temperature	°F	0.1	0.1	NE	--	**67**	--	--	**86**
Turbidity	Quarterly	SM 2130B	NTU	0.1	0.1	NE	--	**0.49**	--	**50**	**75**
Salinity	2x/year	Field Measurement	ppt	--	--	NE	--	--	--	--	--
Chronic Toxicity	2x/year	--	--	--	--	NE	--	--	--	**Pass**	**Pass and % Effect <50**

Table 2. NPDES Effluent Monitoring, First Quarter 2021

SFPP Norwalk Pump Station, Norwalk, California

Analyte	Sampling Frequency	Analytical Method	Units	MDL[a]	RL[a]	ML[b]	01/22/21	02/02/21	March-21	Discharge Limits[c]	
										Monthly Average	Daily Maximum
Di-isopropyl Ether	Annually	EPA 8260B	µg/L	--	--	NE	--	--	--	--	--
Methyl Ethyl Ketone	Annually	EPA 8260B	µg/L	--	--	NE	--	--	--	--	--
Methylene Blue Active Substances	Annually	SM 5540C	mg/L	--	--	NE	--	--	--	--	--
Nitrate + Nitrite as N	Annually	EPA 300.0	mg/L	--	--	NE	--	--	--	--	--
Sulfides	Annually	SM 4500 SD	mg/L	--	--	NE	--	--	--	--	--
Tert Amyl Methyl Ether	Annually	EPA 8260B	µg/L	--	--	NE	--	--	--	--	--
TCDD Equivalents	Annually	EPA 8290	pg/L	--	--	NE	--	--	--	--	--
Other Priority Pollutants	Annually	--	--	--	--	--	--	--	--	--	--

Notes:

[a] The highest MDL and RL during this reporting period are shown.

[b] ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. It is also the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes, and processing steps have been followed.

[c] California Regional Water Quality Control Board Waste Discharge Requirements (WDRs) under Order No. R4-2016-0309.

[d] The data were qualified as nondetect due to associated method blank contamination.

[e] Discharged 1,060 gallons on March 2, for maintenance purposes. GWTS was in recirculation mode since February 25, 2021. Discharge was from groundwater extacted in February.

[f] Total TPH value was reduced because TPH-gasoline results qualified as nondetect due to associated method blank contamination.

[g] A "J" qualifier was added as an interpreted qualifer during validation process, due to surrogate was less than the lower control limit.

[h] Laboratory PDF reported ND at the PQL, but did not report result to MDL. EDD correctly reported results between MDL and PQL, and was therfore presented in summary table.

[i] Mercury was detected less than the RL in the method blanks for Method EPA 245.1. Two associated results were detected less than five times the blank concentrations and were qualified as not detected in samples EFF-01-22-21 and EFF-020221.

-- = not measured or not analyzed

< = not detected above the MDL

° F = degrees Fahrenheit

µg/L = micrograms per liter

DNQ = detected, but not quantified; result is greater than or equal to the laboratory MDL but less than the ML (or RL if no ML is listed)

EPA = U.S. Environmental Protection Agency

gpd = gallons per day

GWTS = groundwater treatment system

J = detected at a concentration below the RL and above the MDL; reported value is estimated

lb/day = pounds per day

RL = laboratory reporting limit

PQL = practical quantitation limit

MDL = laboratory method detection limit

ML = minimum level (see note b)

mL/L/hr = milliliters per liter per hour

NE = not established

NPDES = National Pollutant Discharge Elimination System

NTU = nephelometric turbidity unit(s)

mg/L = milligrams per liter

pg/L = picograms per liter

ppt = parts per thousand

s.u. = standard unit(s)

TCDD = tetrachlorodibenzodioxin

TPH = total petroleum hydrocarbons

Table 3. Maximum Daily Flow in Coyote Creek, First Quarter 2021

SFPP Norwalk Pump Station, Norwalk, California

Date	Maximum Daily Flow Rate (cfs)[a]	Comments
01/01/21	7.72	
01/02/21	7.12	
01/03/21	4.16	
01/04/21	8.35	
01/05/21	10.4	
01/06/21	4.48	
01/07/21	6.01	
01/08/21	7.72	
01/09/21	5.15	
01/10/21	6.01	
01/11/21	6.01	
01/12/21	6.01	
01/13/21	6.55	
01/14/21	25.2	
01/15/21	6.01	
01/16/21	6.01	
01/17/21	7.12	
01/18/21	6.55	
01/19/21	7.72	
01/20/21	5.15	
01/21/21	7.72	
01/22/21	7.72	Monthly effluent sample
01/23/21	972	
01/24/21	355	
01/25/21	1540	
01/26/21	20.5	
01/27/21	7.12	
01/28/21	4,210	
01/29/21	3,100	
01/30/21	95.7	
01/31/21	11.2	
02/01/21	19.1	
02/02/21	16.5	Quarterly effluent sample
02/03/21	16.5	
02/04/21	9.02	
02/05/21	13.0	
02/06/21	12.0	
02/07/21	15.3	
02/08/21	25.2	
02/09/21	23.6	
02/10/21	25.2	
02/11/21	27.9	
02/12/21	267	
02/13/21	35.4	
02/14/21	30.8	
02/15/21	13.0	
02/16/21	43.3	
02/17/21	15.3	
02/18/21	51.2	
02/19/21	14.1	
02/20/21	16.5	

Table 3. Maximum Daily Flow in Coyote Creek, First Quarter 2021

SFPP Norwalk Pump Station, Norwalk, California

Date	Maximum Daily Flow Rate (cfs)[a]	Comments
02/21/21	16.5	
02/22/21	23.6	
02/23/21	30.8	
02/24/21	30.8	
02/25/21	33.8	
02/26/21	35.4	
02/27/21	52.8	
02/28/21	54.5	
03/01/21	52.8	
03/02/21	76.3	
03/03/21	1,580	
03/04/21	84.9	
03/05/21	13.0	
03/06/21	9.71	
03/07/21	9.02	
03/08/21	10.4	
03/09/21	10.4	
03/10/21	1,090	
03/11/21	1,220	
03/12/21	29.30	
03/13/21	9.71	
03/14/21	7.72	
03/15/21	403	
03/16/21	33.8	
03/17/21	7.12	
03/18/21	10.4	
03/19/21	7.72	
03/20/21	7.12	
03/21/21	11.2	
03/22/21	9.02	
03/23/21	9.02	
03/24/21	9.71	
03/25/21	9.71	
03/26/21	9.02	
03/27/21	12.0	
03/28/21	9.02	
03/29/21	8.35	
03/30/21	10.4	
03/31/21	12.0	

Notes:

[a] A wet weather event is any day when the maximum daily flow of Coyote Creek is greater than or equal to 156 cfs.

A dry weather event is any day when the maximum daily flow of Coyote Creek is less than 156 cfs.

cfs = cubic feet per second

Table 4. Harbor Toxics TMDL Water Chemistry Field Measurement Summary

SFPP Norwalk Pump Station, Norwalk, California

Date	Weather Event Type	Depth Collected (meters)	Velocity (fps)	Air Temperature °C	Water Temperature °C	pH	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Specificy Conductivity (µS/cm)	Salinity (ppt)	Turbidity (NTU)	Secchi Disc Visibility (ft)
1/25/2021	Wet	0.75	1.3	12.8	19.57	7.63	8.74	104.3	18.9	11.2	0	1.5
9/30/2020	Dry	1	0.4	19.4	23.97	7.49	6.1	83.7	45.5	29.4	0	9.5
4/7/2020	Wet	0.2	1.1	15.6	21.74	6.78	8.41	--	42.7	26.6	0	1.5
3/13/2020	Wet	0.2	0.9	14	16.22	8.76	11.47	114.5	8070	4.45	61.2	1.2
9/13/2019	Dry	0.2	1.5	30.5	28.0	8.19	7.01	--	50.3	3.29	0	12.5
3/7/2019	Wet	0.2	1.5	15.6	15.91	7.75	11.4	119.2	9.44	5.27	62.3	1.75
2/1/2019	Dry	0.2	3.4	13.3	15.57	7.83	10.87	116.3	13.1	7.5	73.1	1.5
1/15/2019	Wet	0.2	0.4	16.1	17.18	7.15	6.95	--	9540	5.3	27.3	1.5
11/30/2018	Wet	0.2	0.6	13.3	18.3	6.59	11.12	--	19.3	11.4	29.6	1.5
7/11/2018	Dry	0.2	0.9	28.3	27.5	8.08	5.27	--	50.9	--	--	1.5

Notes:

Field measurements collected with Horiba U-52

fps = feet per second

°C = degrees Celcius

MDL = laboratory method detection limit

mg/L = milligrams per liter

% = percent

µS/cm = micro Siemens per centimeter

ppt = parts per thousand

NTU = nephelometric turbidity unit(s)

ft = feet

-- = not measured or not analyzed

Table 5. Harbor Toxics TMDL Water Chemistry Analytical Summary

SFPP Norwalk Pump Station, Norwalk, California

Parameter Name	Analytical Method	Report Units	Target MDL	01/25/2021[1,2]			
				SG1-01252021-WW	SG1-01252021-WD	SG1-01252021-MS/MSD	SG1-01252021-EB
Suspended Solids (Residue, Non-Filterable)	A2540D	mg/L	1	19	22	23	<0.50
Copper	E200.8	ug/L	10	8.9	11	11	<0.50
Lead	E200.8	ug/L	10	1.6	1.8	1.9	<0.50
Zinc	E200.8	ug/L	50	39	39	39	<2.5
2,4'-DDT	SW8081A	ug/L	0.019	<0.0016	<0.0016	<0.0016	<0.0018
4,4'-DDT	SW8081A	ug/L	0.0052	<0.0049	<0.0049	<0.0049 F1, F2	<0.0055
Total DDT (2,4-DDT + 4,4-DDT)	SW8081A	ug/L	0.019	<0.0065	<0.0065	<0.0065 F1, F2	<0.0073
1-Methyl naphthalene	SW8270C SIM	ug/L	0.011	<0.069	<0.069	<0.069	<0.70
2-Methyl naphthalene	SW8270C SIM	ug/L	0.013	<0.073	<0.073	<0.073	<0.074
Acenaphthene	SW8270C SIM	ug/L	0.014	<0.092	<0.092	<0.092	<0.093
Acenaphthylene	SW8270C SIM	ug/L	0.011	<0.065	<0.065	<0.065	<0.066
Anthracene	SW8270C SIM	ug/L	0.015	<0.056	<0.056	<0.056	<0.057
Benzo(a)anthracene	SW8270C SIM	ug/L	0.013	<0.081	<0.081	<0.081	<0.082
Benzo(a)pyrene	SW8270C SIM	ug/L	0.019	<0.059	<0.059	<0.059	<0.060
Benzo(b)fluoranthene	SW8270C SIM	ug/L	0.023	<0.11	<0.11	<0.11	<0.11
Benzo(g,h,i)perylene	SW8270C SIM	ug/L	0.022	<0.095	<0.095	<0.096	<0.097
Benzo(k)fluoranthene	SW8270C SIM	ug/L	0.011	<0.088	<0.088	<0.088	<0.090
Chrysene	SW8270C SIM	ug/L	0.023	<0.056	<0.056	<0.056	<0.057
Decachlorobiphenyl	SW8270C SIM	ug/L	0.0015	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C SIM	ug/L	0.018	<0.11	<0.11	<0.11	<0.11
Fluoranthene	SW8270C SIM	ug/L	0.015	<0.064	<0.064	<0.064 F2	<0.065
Fluorene	SW8270C SIM	ug/L	0.013	<0.071	<0.071	<0.071	<0.072
Indeno[1,2,3-cd]pyrene	SW8270C SIM	ug/L	0.022	<0.10	<0.10	<0.10	<0.10
Naphthalene	SW8270C SIM	ug/L	0.014	<0.078	<0.078	<0.078	<0.079
Phenanthrene	SW8270C SIM	ug/L	0.0052	<0.069	<0.069	<0.069	<0.070
Pyrene	SW8270C SIM	ug/L	0.013	<0.062	<0.062	<0.063	<0.064
Total PCBs	SW8270C SIM	ug/L	--	<2.01	<2.01	<2.01 F1,F2	<2.01

Notes:

TMDL = total maximum daily load

< = not detected above the MDL

MDL = laboratory method detection limit

mg/L = milligrams per liter

µg/L = micrograms per liter

1 = samples collected on 1/25/21 were collected during a wet weather event

2 = Coyote Creek station F354-R maximum flow was approximately 1,540 cubic feet per second

F1 = MS and/or MSD recovery exceeds control limits.

F2 = MS/MSD RPD exceeds control limits

MS/MSD = matrix spike and spike duplicate

SG1 = location 1

WD = wet weather duplicate water sample

WW = wet weather water sample

EB = equipment blank

EPA = U.S. Environmental Protection Agency

DDT = dichlorodiphenyltrichloroethane

PCB = polychlorinated biphenyl

-- = not measured or not analyzed

Figures

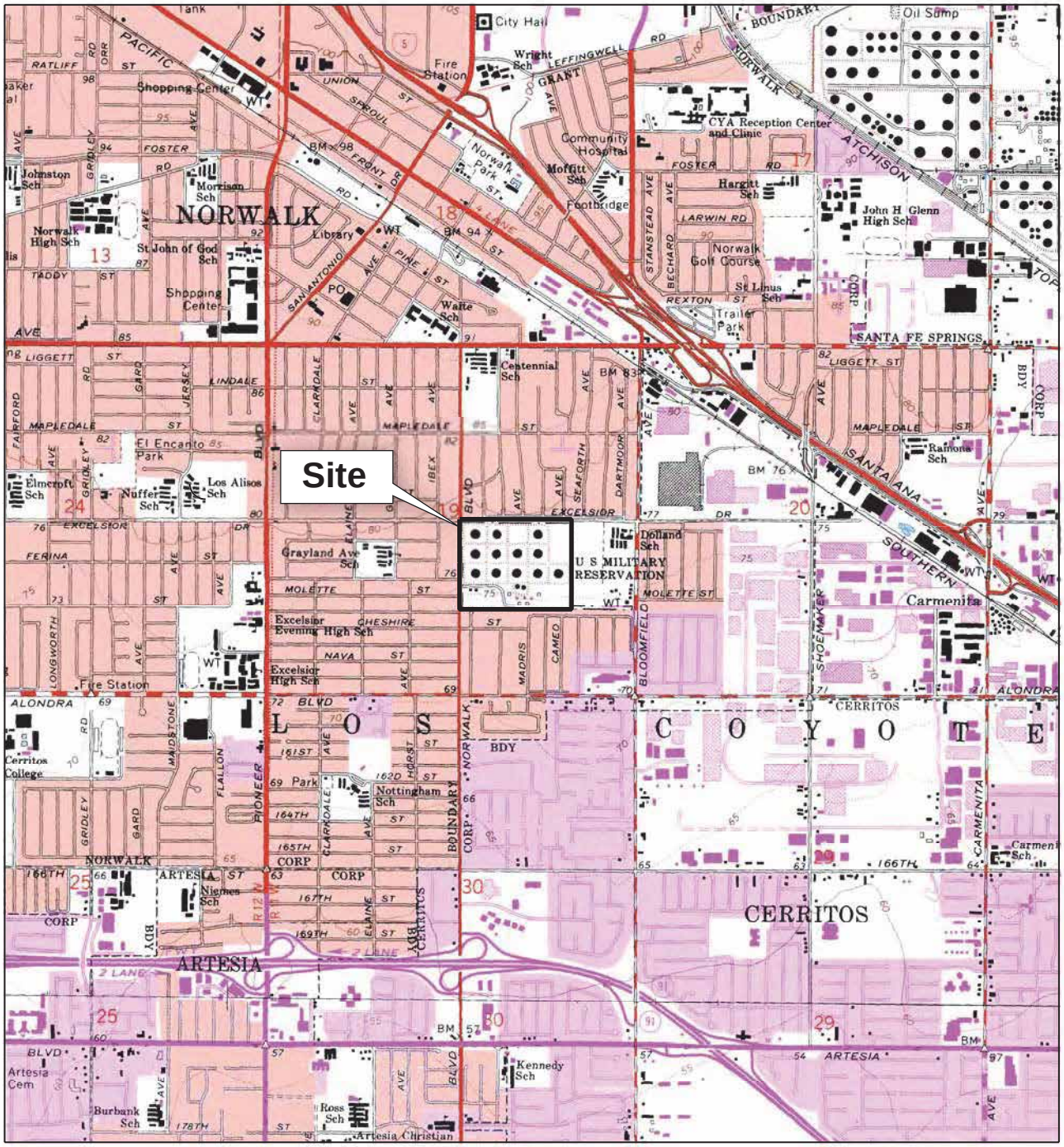

Figure 1. Site Location Map
SFPP Norwalk Pump Station
Norwalk, California

BASEMAP MODIFIED FROM U.S.G.S. 7.5 MINUTE QUADRANGLE MAP
LOS ALAMITOS 1964, CALIFORNIA. PHOTO-REVISED 1981.
WHITTIER 1965, CALIFORNIA. PHOTO-REVISED 1981.

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LEGEND

- Soil Vapor Probe/Soil Vapor Monitoring Probe
- Destroyed Soil Vapor Probe/Soil Vapor Monitoring Probe
- Horizontal Biosparge Well Entry Point
- Existing Groundwater Monitoring Well
- Existing Remediation Well
- Kinder Morgan Combined Soil Vapor and Total Fluids Extraction Wells
- Kinder Morgan Soil Vapor Extraction Wells
- Kinder Morgan Total Fluids and/or Groundwater Extraction Wells
- Kinder Morgan Remediation Piping Layout (Above Ground and Below Ground)
- Horizontal Biosparge Well (Dashed Line Depicts Approximate Lateral Extent of Well Screen)
- Air Compressor System

Imagery Source:
Google Earth December 3, 2017.

N

0 75 150 300
Feet

1 inch = 150 feet

Figure 2. Remediation System Layout
SFPP Norwalk Pump Station
Norwalk, California

Jacobs

\\DC1VS01\GISPROJ\K\KINDERMORGAN\NORWALK\MAPFILES\2020\FIGURE_2_REMEDIATION_SYSTEM_LAYOUT.MXD AESPEJO 7/10/2020
FES0713201942SCO

Attachment A
Laboratory Analytical Reports and Chain-of-Custody Documents

February 03, 2021

Eric Davis
CH2MHill
1000 Wilshire Blvd.
Los Angeles, CA 90017

TEL:
FAX:

Workorder No.: N043863

RE: SFPP Norwalk

Attention: Eric Davis

Enclosed are the results for sample(s) received on January 22, 2021 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Sibucao
Laboratory Director

CLIENT: CH2MHill
Project: SFPP Norwalk
Lab Order: N043863

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Results were J-Flag. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" Flagged are estimated values since it becomes difficult to accurately quantitate the analyte near the MDL.

Analytical comments for EPA 8260B:

RPD for Matrix Spike (MS)/Matrix Spike Duplicate (MSD) is outside criteria on analyte Tert-Butanol; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

CLIENT: CH2MHill
Project: SFPP Norwalk
Lab Order: N043863
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N043863-001A	EFF-01-22-21	Water	1/22/2021 12:55:00 PM	1/22/2021	2/3/2021
N043863-001B	EFF-01-22-21	Water	1/22/2021 12:55:00 PM	1/22/2021	2/3/2021
N043863-001C	EFF-01-22-21	Water	1/22/2021 12:55:00 PM	1/22/2021	2/3/2021
N043863-001D	EFF-01-22-21	Water	1/22/2021 12:55:00 PM	1/22/2021	2/3/2021
N043863-001E	EFF-01-22-21	Water	1/22/2021 12:55:00 PM	1/22/2021	2/3/2021
N043863-001F	EFF-01-22-21	Water	1/22/2021 12:55:00 PM	1/22/2021	2/3/2021
N043863-001G	EFF-01-22-21	Water	1/22/2021 12:55:00 PM	1/22/2021	2/3/2021

CLIENT: CH2MHill
Lab Order: N043863
Project: SFPP Norwalk
Lab ID: N043863-001

Client Sample ID: EFF-01-22-21
Collection Date: 1/22/2021 12:55:00 PM
Matrix: WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 3510C			**EPA 8270C**				
RunID: **NV00922-MS3_210129A** QC Batch: **84016**				PrepDate:	**1/28/2021**		Analyst: **PL**
Phenol	ND	0.33	1.0		µg/L	1	1/29/2021 05:47 PM
Surr: Phenol-d5	59.0	0	25-108		%REC	1	1/29/2021 05:47 PM
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **CA01638-MS08_210125A** QC Batch: **R21VW005**				PrepDate:			Analyst: **AW**
1,1-Dichloroethane	ND	0.22	0.50		ug/L	1	1/25/2021 02:26 PM
1,2-Dichloroethane	ND	0.16	0.50		ug/L	1	1/25/2021 02:26 PM
Benzene	ND	0.11	1.0		ug/L	1	1/25/2021 02:26 PM
Ethylbenzene	ND	0.11	1.0		ug/L	1	1/25/2021 02:26 PM
m,p-Xylene	ND	0.23	1.0		ug/L	1	1/25/2021 02:26 PM
MTBE	ND	0.44	1.0		ug/L	1	1/25/2021 02:26 PM
o-Xylene	ND	0.087	1.0		ug/L	1	1/25/2021 02:26 PM
Tert-Butanol	ND	2.8	5.0		ug/L	1	1/25/2021 02:26 PM
Toluene	ND	0.13	2.0		ug/L	1	1/25/2021 02:26 PM
Xylenes, Total	ND	1.5	2.0		ug/L	1	1/25/2021 02:26 PM
Surr: 1,2-Dichloroethane-d4	113	0	72-119		%REC	1	1/25/2021 02:26 PM
Surr: 4-Bromofluorobenzene	101	0	76-119		%REC	1	1/25/2021 02:26 PM
Surr: Dibromofluoromethane	111	0	85-115		%REC	1	1/25/2021 02:26 PM
Surr: Toluene-d8	102	0	81-120		%REC	1	1/25/2021 02:26 PM
TPH EXTRACTABLE BY GC/FID							
EPA 3510C			**EPA 8015B**				
RunID: **NV00922-GC3_210125B** QC Batch: **83968**				PrepDate:	**1/25/2021**		Analyst: **LLR**
TPH-Diesel (C13-C22)	23	15	25	J	ug/L	1	1/26/2021 01:18 PM
TPH-Oil (C23-C36)	53	14	25		ug/L	1	1/26/2021 01:18 PM
Surr: Octacosane	78.1	0	26-152		%REC	1	1/26/2021 01:18 PM
Surr: p-Terphenyl	81.6	0	57-132		%REC	1	1/26/2021 01:18 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_210125A** QC Batch: **E21VW007**				PrepDate:			Analyst: **BH**
TPH-Gasoline (C4-C12)	32	21	50	J	ug/L	1	1/25/2021 02:13 PM
Surr: Chlorobenzene - d5	106	0	74-138		%REC	1	1/25/2021 02:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified
E	Value above quantitation range
J	Analyte detected below quantitation limits
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *03-Feb-21*

CLIENT:	CH2MHill	**Client Sample ID:**	EFF-01-22-21
Lab Order:	N043863	**Collection Date:**	1/22/2021 12:55:00 PM
Project:	SFPP Norwalk	**Matrix:**	WATER
Lab ID:	N043863-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE							
EPA 245.1							
RunID: **NV00922-AA2_210125A** QC Batch: **83965** PrepDate: **1/25/2021** Analyst: **DJ**							
Mercury	0.047	0.018	0.050	J	µg/L	1	1/25/2021 12:30 PM
TOTAL METALS BY ICPMS							
EPA 200.8							
RunID: **NV00922-ICP8_210126A** QC Batch: **83977** PrepDate: **1/26/2021** Analyst: **CEI**							
Copper	ND	0.26	0.50		µg/L	1	1/26/2021 12:31 PM
Lead	ND	0.13	0.50		µg/L	1	1/26/2021 12:31 PM
Zinc	ND	0.27	1.0		µg/L	1	1/26/2021 12:31 PM
TOTAL TPH							
EPA 8015B							
RunID: **NV00922-GC3_210125B** QC Batch: **R150311** PrepDate: Analyst: **LLR**							
Total TPH	110	21	100		ug/L	1	1/26/2021

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified	DO	Surrogate Diluted Out

CLIENT: CH2MHill
Work Order: N043863
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W_SFPP

Sample ID: **MB-83977** SampType: **MBLK** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **1/26/2021** RunNo: **150306**
Client ID: **PBW** Batch ID: **83977** TestNo: **EPA 200.8** Analysis Date: **1/26/2021** SeqNo: **4086440**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.50									
Lead	ND	0.50									
Zinc	0.564	1.0									J

Sample ID: **LCS-83977** SampType: **LCS** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **1/26/2021** RunNo: **150306**
Client ID: **LCSW** Batch ID: **83977** TestNo: **EPA 200.8** Analysis Date: **1/26/2021** SeqNo: **4086441**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	10.234	0.50	10.00	0	102	85	115				
Lead	10.195	0.50	10.00	0	102	85	115				
Zinc	95.034	1.0	100.0	0	95.0	85	115				

Sample ID: **N043863-001D-DUP** SampType: **DUP** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **1/26/2021** RunNo: **150306**
Client ID: **ZZZZZZ** Batch ID: **83977** TestNo: **EPA 200.8** Analysis Date: **1/26/2021** SeqNo: **4086444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.50						0	0	20	
Lead	ND	0.50						0	0	20	
Zinc	0.365	1.0						0	0	20	J

Sample ID: **N043863-001D-MS** SampType: **MS** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **1/26/2021** RunNo: **150306**
Client ID: **ZZZZZZ** Batch ID: **83977** TestNo: **EPA 200.8** Analysis Date: **1/26/2021** SeqNo: **4086446**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	8.491	0.50	10.00	0	84.9	75	125				
Lead	10.567	0.50	10.00	0	106	75	125				
Zinc	83.743	1.0	100.0	0	83.7	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N043863
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W_SFPP

Sample ID: **N043863-001D-MSD** SampType: **MSD** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **1/26/2021** RunNo: **150306**
Client ID: **ZZZZZZ** Batch ID: **83977** TestNo: **EPA 200.8** Analysis Date: **1/26/2021** SeqNo: **4086447**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	8.523	0.50	10.00	0	85.2	75	125	8.491	0.381	20	
Lead	10.614	0.50	10.00	0	106	75	125	10.57	0.450	20	
Zinc	83.537	1.0	100.0	0	83.5	75	125	83.74	0.246	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N043863
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 245.1_W_LL

Sample ID: **MB-83965**	SampType: **MBLK**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **1/25/2021**	RunNo: **150280**
Client ID: **PBW**	Batch ID: **83965**	TestNo: **EPA 245.1**		Analysis Date: **1/25/2021**	SeqNo: **4085601**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.021	0.050									J

Sample ID: **LCS-83965**	SampType: **LCS**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **1/25/2021**	RunNo: **150280**
Client ID: **LCSW**	Batch ID: **83965**	TestNo: **EPA 245.1**		Analysis Date: **1/25/2021**	SeqNo: **4085602**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.510	0.050	2.500	0	100	85	115				

Sample ID: **N043863-001D-MS**	SampType: **MS**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **1/25/2021**	RunNo: **150280**
Client ID: **ZZZZZZ**	Batch ID: **83965**	TestNo: **EPA 245.1**		Analysis Date: **1/25/2021**	SeqNo: **4085607**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.560	0.050	2.500	0.04700	101	75	125				

Sample ID: **N043863-001D-MSD**	SampType: **MSD**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **1/25/2021**	RunNo: **150280**
Client ID: **ZZZZZZ**	Batch ID: **83965**	TestNo: **EPA 245.1**		Analysis Date: **1/25/2021**	SeqNo: **4085608**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.510	0.050	2.500	0.04700	98.5	75	125	2.560	1.97	20	

Sample ID: **N043863-001D-DUP**	SampType: **DUP**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **1/25/2021**	RunNo: **150280**
Client ID: **ZZZZZZ**	Batch ID: **83965**	TestNo: **EPA 245.1**		Analysis Date: **1/25/2021**	SeqNo: **4085612**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.050						0.04700	0	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N043863
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB1-83968** SampType: **MBLK** TestCode: **8015_W_FP_** Units: **ug/L** Prep Date: **1/25/2021** RunNo: **150311**
Client ID: **PBW** Batch ID: **83968** TestNo: **EPA 8015B** **EPA 3510C** Analysis Date: **1/26/2021** SeqNo: **4086596**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Diesel (C13-C22)	ND	25									
TPH-Oil (C23-C36)	ND	25									
Surr: Octacosane	84.510		80.00		106	26	152				
Surr: p-Terphenyl	84.530		80.00		106	57	132				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N043863
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_SFPPTOT

Sample ID: **MB-R150311** SampType: **MBLK** TestCode: **8015_W_SFP** Units: **ug/L** Prep Date: RunNo: **150311**
Client ID: **PBW** Batch ID: **R150311** TestNo: **EPA 8015B** Analysis Date: **1/26/2021** SeqNo: **4086902**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total TPH	26.000	100									J

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N043863
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **E210125LCS** SampType: **LCS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150286**
Client ID: **LCSW** Batch ID: **E21VW007** TestNo: **EPA 8015B** Analysis Date: **1/25/2021** SeqNo: **4085791**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	1037.000	50	1000	0	104	67	136				
Surr: Chlorobenzene - d5	42101.000		50000		84.2	74	138				

Sample ID: **E210125LCSD** SampType: **LCSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150286**
Client ID: **LCSS02** Batch ID: **E21VW007** TestNo: **EPA 8015B** Analysis Date: **1/25/2021** SeqNo: **4085792**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	992.000	50	1000	0	99.2	67	136	1037	4.44	30	
Surr: Chlorobenzene - d5	44057.000		50000		88.1	74	138		0	0	

Sample ID: **E210125MB** SampType: **MBLK** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150286**
Client ID: **PBW** Batch ID: **E21VW007** TestNo: **EPA 8015B** Analysis Date: **1/25/2021** SeqNo: **4085793**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	26.000	50									J
Surr: Chlorobenzene - d5	45438.000		50000		90.9	74	138				

Sample ID: **N043863-001BMS** SampType: **MS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150286**
Client ID: **ZZZZZZ** Batch ID: **E21VW007** TestNo: **EPA 8015B** Analysis Date: **1/25/2021** SeqNo: **4085795**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	928.000	50	1000	32.00	89.6	67	136				
Surr: Chlorobenzene - d5	46664.000		50000		93.3	74	138				

Sample ID: **N043863-001BMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150286**
Client ID: **ZZZZZZ** Batch ID: **E21VW007** TestNo: **EPA 8015B** Analysis Date: **1/25/2021** SeqNo: **4085796**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	924.000	50	1000	32.00	89.2	67	136	928.0	0.432	30	

Qualifiers:

B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N043863
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **N043863-001BMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150286**
Client ID: **ZZZZZZ** Batch ID: **E21VW007** TestNo: **EPA 8015B** Analysis Date: **1/25/2021** SeqNo: **4085796**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Chlorobenzene - d5	45740.000		50000		91.5	74	138		0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N043863
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **R210125-LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150290**
Client ID: **LCSW** Batch ID: **R21VW005** TestNo: **EPA 8260B** Analysis Date: **1/25/2021** SeqNo: **4086064**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	21.120	0.50	20.00	0	106	69	133				
1,2-Dichloroethane	20.710	0.50	20.00	0	104	69	132				
Benzene	20.800	1.0	20.00	0	104	81	122				
Ethylbenzene	20.590	1.0	20.00	0	103	73	127				
m,p-Xylene	43.180	1.0	40.00	0	108	76	128				
MTBE	18.900	1.0	20.00	0	94.5	65	123				
o-Xylene	20.840	1.0	20.00	0	104	80	121				
Tert-Butanol	82.350	5.0	100.0	0	82.4	70	130				
Toluene	20.700	2.0	20.00	0	104	77	122				
Xylenes, Total	64.020	2.0	60.00	0	107	75	125				
Surr: 1,2-Dichloroethane-d4	25.070		25.00		100	72	119				
Surr: 4-Bromofluorobenzene	25.890		25.00		104	76	119				
Surr: Dibromofluoromethane	26.330		25.00		105	85	115				
Surr: Toluene-d8	25.140		25.00		101	81	120				

Sample ID: **N043863-001A-MS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150290**
Client ID: **ZZZZZZ** Batch ID: **R21VW005** TestNo: **EPA 8260B** Analysis Date: **1/25/2021** SeqNo: **4086065**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	24.060	0.50	20.00	0	120	69	133				
1,2-Dichloroethane	21.080	0.50	20.00	0	105	69	132				
Benzene	23.170	1.0	20.00	0	116	81	122				
Ethylbenzene	23.220	1.0	20.00	0	116	73	127				
m,p-Xylene	48.540	1.0	40.00	0	121	76	128				
MTBE	18.890	1.0	20.00	0	94.4	65	123				
o-Xylene	23.000	1.0	20.00	0	115	80	121				
Tert-Butanol	78.510	5.0	100.0	0	78.5	70	130				
Toluene	23.170	2.0	20.00	0	116	77	122				
Xylenes, Total	71.540	2.0	60.00	0	119	75	125				
Surr: 1,2-Dichloroethane-d4	25.170		25.00		101	72	119				

Qualifiers:

B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N043863
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N043863-001A-MS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150290**
Client ID: **ZZZZZZ** Batch ID: **R21VW005** TestNo: **EPA 8260B** Analysis Date: **1/25/2021** SeqNo: **4086065**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	25.490		25.00		102	76	119				
Surr: Dibromofluoromethane	26.370		25.00		105	85	115				
Surr: Toluene-d8	24.660		25.00		98.6	81	120				

Sample ID: **N043863-001A-MSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150290**
Client ID: **ZZZZZZ** Batch ID: **R21VW005** TestNo: **EPA 8260B** Analysis Date: **1/25/2021** SeqNo: **4086066**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	21.770	0.50	20.00	0	109	69	133	24.06	9.99	20	
1,2-Dichloroethane	21.210	0.50	20.00	0	106	69	132	21.08	0.615	20	
Benzene	21.280	1.0	20.00	0	106	81	122	23.17	8.50	20	
Ethylbenzene	21.010	1.0	20.00	0	105	73	127	23.22	9.99	20	
m,p-Xylene	43.770	1.0	40.00	0	109	76	128	48.54	10.3	20	
MTBE	20.150	1.0	20.00	0	101	65	123	18.89	6.45	20	
o-Xylene	21.210	1.0	20.00	0	106	80	121	23.00	8.10	20	
Tert-Butanol	96.920	5.0	100.0	0	96.9	70	130	78.51	21.0	20	R
Toluene	21.210	2.0	20.00	0	106	77	122	23.17	8.83	20	
Xylenes, Total	64.980	2.0	60.00	0	108	75	125	71.54	9.61	20	
Surr: 1,2-Dichloroethane-d4	26.530		25.00		106	72	119		0		
Surr: 4-Bromofluorobenzene	25.450		25.00		102	76	119		0		
Surr: Dibromofluoromethane	26.230		25.00		105	85	115		0		
Surr: Toluene-d8	24.150		25.00		96.6	81	120		0		

Sample ID: **R210125-MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150290**
Client ID: **PBW** Batch ID: **R21VW005** TestNo: **EPA 8260B** Analysis Date: **1/25/2021** SeqNo: **4086067**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	ND	0.50									
1,2-Dichloroethane	ND	0.50									
Benzene	ND	1.0									

Qualifiers:

B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N043863
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **R210125-MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150290**
Client ID: **PBW** Batch ID: **R21VW005** TestNo: **EPA 8260B** Analysis Date: **1/25/2021** SeqNo: **4086067**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0									
m,p-Xylene	ND	1.0									
MTBE	ND	1.0									
o-Xylene	ND	1.0									
Tert-Butanol	ND	5.0									
Toluene	ND	2.0									
Xylenes, Total	ND	2.0									
Surr: 1,2-Dichloroethane-d4	29.250		25.00		117	72	119				
Surr: 4-Bromofluorobenzene	26.070		25.00		104	76	119				
Surr: Dibromofluoromethane	28.750		25.00		115	85	115				
Surr: Toluene-d8	25.380		25.00		102	81	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N043863
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270WATER_SIMEXT

Sample ID: **LCS-84016** SampType: **LCS** TestCode: **8270WATER_** Units: **µg/L** Prep Date: **1/28/2021** RunNo: **150427**
Client ID: **LCSW** Batch ID: **84016** TestNo: **EPA 8270C** **EPA 3510C** Analysis Date: **1/29/2021** SeqNo: **4093060**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	2.050	1.0	6.000	0	34.2	24	120				
Surr: Phenol-d5	0.340		1.000		34.0	25	108				

Sample ID: **LCSD-84016** SampType: **LCSD** TestCode: **8270WATER_** Units: **µg/L** Prep Date: **1/28/2021** RunNo: **150427**
Client ID: **LCSS02** Batch ID: **84016** TestNo: **EPA 8270C** **EPA 3510C** Analysis Date: **1/29/2021** SeqNo: **4093061**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	2.080	1.0	6.000	0	34.7	24	120	2.050	1.45	20	
Surr: Phenol-d5	0.340		1.000		34.0	25	108		0		

Sample ID: **MB-84016** SampType: **MBLK** TestCode: **8270WATER_** Units: **µg/L** Prep Date: **1/28/2021** RunNo: **150427**
Client ID: **PBW** Batch ID: **84016** TestNo: **EPA 8270C** **EPA 3510C** Analysis Date: **1/29/2021** SeqNo: **4093062**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	1.0									
Surr: Phenol-d5	0.570		1.000		57.0	25	108				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

N043863

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CHAIN OF CUSTODY RECORD
DATE: 1/22/21
PAGE: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Section D Sampler Information:	
Company:	Kinder Morgan Energy Partners Attention: Court Reece	Report To:	Eric Davis	Attention:	Court Reece - Ref. AFE# 81195	Sampler Name:	James Dye
Address:	1001 Louisiana St., Houston, TX 77002	Copy To:	Court Reece	Company Name:	Kinder Morgan Energy Partners	Sampler Signature:	[signature]
Email To:	court_reece@kindermorgan.com eric.davis@jacobs.com; nils.orliczky@jacobs.com	Purchase Order No.:		Address:	1001 Louisiana St., Houston, TX 77002	Sample Date:	1/22/21
Phone 713-420-6730	Fax: 714-560-4801	Project Name:	SFPP Norwalk	ATL Project Manager:	Marlon Cartin		

Section E Required Sample Information

ITEM #	SAMPLE ID	LOCATION/ DESCRIPTION	MATRIX	SAMPLE TYPE (G=GRAB C=COMP)	SAMPLING DATE	SAMPLING TIME	TOTAL # OF CONTAINERS	Analysis Test	BTEX, 1,1-DCA, 1,2-DCA, MTBE, TBA (8260B)	TPH-gas (C4-C12) (8015B)	TPH-d (C13-C22), TPH-oil (C23+), Total TPH (8015B)	Cu, Pb, Zn (200.8); Hg (245.1)	Phenol (8270)	BOD (@ 20 deg. C)(SM5210B)	Ammonia Nitrogen (as N) (SM-4500 NH3C)	Comments
								CONTAINER TYPE	V	V	A	P	A	P	P	
								# OF CONTAINERS	3	3	3	1	2	1	1	
								PRESERVATIVE	H	H	--	N	–	–	S	
								VOLUME (mL)	40	40	1000	500	1000	1000	500	CA: 5.6°C IR#2
1	EFF-01-~~20~~-21	EFFLUENT	W	G	1/20/21	1255	14		X	X	X	X	X	X	X	N043863-01
2																Report metals, TPH and VOC preliminary data on 24-hr TAT
3																Report total Xylenes
4																
5																
6																
7																
8																
9																
10																

Relinquished by (Signature and Printed Name):	Date / Time	Recieved by (Signature and Printed Name):	Date / Time
[signature]	1/20/21 1315	[signature] TAAD	1/22/21 1422
[signature] JTAD	1/22/21 1438	[signature] A·DASILVA	1/22/21 1438
[signature] A·DASILVA	1/22/21 1800	[signature] JIGE	1/23/21 954 Am

Turn Around Time (TAT):
- A = Same Day
- B = 24 Hours (circled)
- C = 48 Hours
- D = 72 Hours
- E = 5 Workdays (circled)
- E = 10 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00 PM.

Special Instruction: Los Vegas 1.5°c IR#2 GSO#8118

Matrix:			Preservatives:			Container Type:			
W = Water	WW = Wastewater		H = HCl	N = HNO3	S = H2SO4	T = Tube	V = VOA	P = Pint	A = Amber
O = Oil	P = Product	S = Soil	Z = Zn(AC)2	O = NaOH	T = Na2S2O3	J = Jar	B = Tedlar	G = Glass	
Others/Specify:			Others/Specify:			M = Metal	P = Plastic	C = Can	

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	1/22/2021	Workorder:	N043863
Rep sample Temp (Deg C):	5.6	IR Gun ID:	2
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☑	No ☐	NA ☐
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments: Received at Las Vegas Lab on 1/23/21 at 1.5 oC, IR# 2, GSO# 8118.

For:

Checklist Completed By: AD BHdez 1/25/2021

Reviewed By: MBC 01/25/2021

ASSET Laboratories

WORK ORDER Summary

25-Jan-21

WorkOrder: N043863

Client ID: CH2HI03

Project: SFPP Norwalk **QC Level:** RTNE **Date Received:** 1/22/2021

Comments: Report metals, TPH and VOC preliminary data on 24-hr TAT

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N043863-001A	EFF-01-22-21	1/22/2021 12:55:00 PM	1/26/2021	Water	EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	V-CA
N043863-001B			1/26/2021		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	VW
N043863-001C			1/26/2021		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			1/26/2021		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			1/26/2021		EPA 8015B	Total TPH	☐	☐	☐	WW
N043863-001D			1/26/2021			AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			1/26/2021		EPA 200.8	TOTAL METALS BY ICPMS	☐	☐	☐	WW
			1/26/2021		EPA 245.1	MERCURY BY COLD VAPOR TECHNIQUE	☐	☐	☐	WW
			1/26/2021			MERCURY PREP	☐	☐	☐	WW
N043863-001E			1/29/2021		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: 8270C - SIM	☐	☐	☐	WW
			1/29/2021		EPA 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WW
N043863-001F			1/29/2021		SM 5210 B	BIOCHEMICAL OXYGEN DEMAND	☐	☐	☑	SUB
N043863-001G			1/29/2021		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N043863-002A	FOLDER	1/26/2021	1/26/2021		Folder	Folder	☐	☐	☐	LAB
			1/26/2021		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: RTNE

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: James Dye

22-Jan-21

Sample ID	Matrix	Date Collected	Bottle Type	Requested Tests		
				SM4500-NH3D		
N043863-001G / EFF-01-22-21	Water	1/22/2021 12:55:00 PM	32OZP	1		

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

PO#:N43863B Please email invoices & statements to elvira@assetlaboratories.com. For questions, call Thad Malit at (562)-219-7435. RESULTS NEEDED: 01/28/21. EMAIL RESULTS TO: reports@assetlaboratories.com, sonny.lorenzo@assetlaboratories.com.

Please analyze sample for Ammonia Nitrogen (as N) by SM-4500 NH3C. **GSO#551997660**

		Date/Time			Date/Time
Relinquished by:	Ashley DaSilva	01/22/21	1800	**Received by:**	
Relinquished by:				**Received by:**	

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL

SUBCOC to WECK

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact us:
Nevada: 3151 W. Post Road, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
California: 11110 Artesia Blvd., Ste B, Cerritos, CA 90703
P: 562.219.7435 F: 562.219.7436
www.assetlaboratories.com

Client: ASSET Laboratories	Report to: Sonny Lorenzo	Bill to: Elvira Allegaert/Accounts Payable	EDD Requirement: Excel EDD ☐ Geotracker ☐ Labspec ☐ Others ☐ Specify:
Address: 11110 Artesia Blvd Ste B	Company: ASSET Laboratories	Address: 11110 Artesia Blvd Ste B	QA/QC: RTNE ☐ RWQCB ☐ CalTrans ☐ Level III ☐ LEVEL IV ☐ Regulatory ☐
Address: Cerritos, CA 90703	Email: sonny.lorenzo@assetlaboratories.com	Cerritos, CA 90703	Sample Receipt Condition: 1. Chilled Y ☐ N ☐; 2. Headspace Y ☐ N ☐; 3. Container Intact Y ☐ N ☐; 4. Seal Present Y ☐ N ☐; 5. IR number; 6. Method of Cooling
Phone: 562.219.7435 Fax: 562.219.7436	Address: 11110 Artesia Blvd Ste B	Email to: elvira@assetlaboratories.com PO# N43863A	Global ID:
Submitted By: Thad Malit	Cerritos, CA 90703	Phone: 562.219.7435 Fax: 562.218.7436	Specify State:
Title: General Manager	Phone: 562.219.7435 Fax: 562.219.7436		Sample Temp: 17.4° T0239
Signature: Date: *I hereby authorize ASSET Labs to perform the tests indicated below:*	Sampled by: JAMES DYE SIGNED	Matrix: Ground ☐ Sediment ☐ Potable ☐ Soil ☐ NPDES ☐ Other Solid ☐ Surface ☐	Analyses Requested: BOD(@20°C SM5210B)
Project Name: SFPP Norwalk	*I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.*		Courier: Tracking No.
Project Number:	Signature: Date:		Remarks

Item No.	Laboratory Work Order No.	Sample ID/Location	Date	Time	Water	Solid	Others	BOD(@20°C SM5210B)	Turn Around Time (TAT)	No. of Containers	Container Type	Preservation
1		EFF-01-22-21	1/22/21	1255	X			X	E	1	P	C
2												
3												
4												
5												
6												
7												
8												
9												
10												

Relinquished by (Signature and Printed Name)	Date / Time	Received by (Signature and Printed Name)	Date / Time
[signature] Thad Malit	1/22/21 1549	[signature]	1/22/21 15:49

Turn Around Time (TAT)
- ☐ A = <24Hrs or Same Day
- ☐ B = Next Workday
- ☐ C = 2 Workdays
- ☐ D = 3 Workdays
- ☒ E = Routine 5-7 Workdays

TAT starts at 8 AM the following day if samples are received after 3:00 PM

Special Instructions:
include reports@assetlaboratories.com, tmalit@assetlaboratories.com and sonny.lorenzo@assetlaboratories.com when reporting

Results needed by 1/29/21

Terms
1. All samples will be disposed in 45 days upon receipt and records will be destroyed in 5 years upon submission of final report.
2. Regular TAT is 5-7 business days, surcharges will apply for rush analysis
   Less than 24 Hrs = 200% Next Day = 100% 2 Workdays = 50% 3 Workdays = 35% 4 Workdays = 20%
3. Custom EDD formats will be an additional 3% of the total project price.
4. Add 10% surcharge for Level III Data Packages, 15% for Level IV Data Packages. Surcharge applied on total project price.
5. Trip Blanks and Equipment Blanks are billable sample.
6. ASSET Laboratories is not responsible for samples collected using incorrect methodology.
7. Terms are net 30 Days.
8. All reports are submitted in electronic format. Please inform ASSET Laboratories if hard copy of report is needed.
9. For subcontract analysis, TAT and Surcharges will vary.

Preservatives				Container Type:		
H: HCl	N: HNO_3	S: H_2SO_4	C: <= 6°C	T = Tube	V = VOA	P = Pint
Z: $Zn(AC)_2$	O: NaOH	T: $Na_2S_2O_3$		J = Jar	B = Tedlar	G = Glass
Others/Specify:				M = Metal	P = Plastic	C = Can

White = Laboratory Copy

Yellow = Customer's Copy

GLS

800-322-5555
www.gls-us.com

Ship From
ASSET LABORATORIES
THAD MALIT
11110 ARTESIA BLVD. SUITE B
CERRITOS, CA 90703

Ship To
ASSET LABORATORIES
MARLON CARTIN
3151 W. POST RD.,
LAS VEGAS, NV 89118

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:
HOLD FOR PICKUP
Signature Type: STANDARD

Tracking #: 551998118

SDS

LAS VEGAS

C89102A

35094699

LVS NV891-A 0

Print Date: 1/22/2021 5:11 PM

Package 2 of 5

1.5°c
1RH2

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.
Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.
Step 2: Fold this page in half.
Step 3: Securely attach this label to your package and do not cover the barcode.

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gls-us.com.

Date of Report: 02/03/2021

Sonny Lorenzo

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Client Project:	N043863
BCL Project:	Cerritos
BCL Work Order:	2102653
Invoice ID:	B405752

Enclosed are the results of analyses for samples received by the laboratory on 1/27/2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Stuart Buttram
Technical Director

Table of Contents

Chain of Custody and Cooler Receipt Form for 2102653 Page 1 of 2

ASSET Laboratories
3161-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 FAX: 7023072691

21-02053

Page 1 of 1

CHAIN-OF-CUSTODY RECORD

QC Level: RTNE

RUSH!

Field Sampler: James Dye

22-Jan-21

Subcontractor:
BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Sample ID	Matrix	Date Collected	Bottle Type	Requested Tests: SM4500-NH3D		
N043863-001G / EFF-01-22-21	Water	1/22/2021 12:55:00 PM	32OZP	1		

CHK BY
DISTRIBUTION
SUB OUT

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com
PO#:N43863B Please email invoices & statements to elvira@assetlaboratories.com. For questions, call Thad Malit at (562)-219-7435. RESULTS NEEDED: 01/28/21. EMAIL RESULTS TO: reports@assetlaboratories.com, sonny.lorenzo@assetlaboratories.com.
Please analyze sample for Ammonia Nitrogen (as N) by SM-4500 NH3C. **GSO#551997660**

		Date/Time		Date/Time
Relinquished by:	Ashley DaSilva	~~01/25/21~~ 1800	Received by:	1-27-21 1040
Relinquished by:		1/25/21	Received by:	

Chain of Custody and Cooler Receipt Form for 2102653 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 1

Submission #: 21-02053

SHIPPING INFORMATION
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☒ (Specify) GLS

SHIPPING CONTAINER
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)

FREE LIQUID
YES ☐ NO ☐
W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 97 Container: PE Thermometer ID: 274

Temperature: (A) 2.0 °C / (C) 1.8 °C

Date/Time 1-27-21 1040

Analyst Init TK

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS	A									
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
oz / 16oz / 32oz AMBER										
oz / 16oz / 32oz JAR										
OIL SLEEVE										
CB VIAL										
LASTIC BAG										
EDLAR BAG										
ERROUS IRON										
NCORE										
MART KIT										
UMMA CANISTER										

mments:

mple Numbering Completed By: CAB Date/Time: 1/27/21 1320

= Actual / C = Corrected

Rev 21 05/23/2016

I:\AWPDocs\Word Perfect\LAB_DOCS\FORMS\SAMREC rev 21

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/03/2021 10:11
Project: Cerritos
Project Number: N043863
Project Manager: Sonny Lorenzo

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2102653-01	**COC Number:**	---	**Receive Date:**	01/27/2021 10:40
	Project Number:	---	**Sampling Date:**	01/22/2021 12:55
	Sampling Location:	NA	**Sample Depth:**	---
	Sampling Point:	N043863-001G / EFF-01-22-21	**Lab Matrix:**	Water
	Sampled By:	James Dye	**Sample Type:**	Water

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/03/2021 10:11
Project: Cerritos
Project Number: N043863
Project Manager: Sonny Lorenzo

Water Analysis (General Chemistry)

BCL Sample ID: 2102653-01 | **Client Sample Name:** NA, N043863-001G / EFF-01-22-21, 1/22/2021 12:55:00PM, James Dye

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Ammonia as N (Distilled)	ND	mg/L	0.20	SM-4500-NH3G	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	SM-4500-NH3G	01/28/21 13:00	01/29/21 09:28	JMH2	SC-1	1.066	B098607	SM 4500-NH3G

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/03/2021 10:11
Project: Cerritos
Project Number: N043863
Project Manager: Sonny Lorenzo

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	Lab Quals
QC Batch ID: B098607					
Ammonia as N (Distilled)	B098607-BLK1	ND	mg/L	0.20	

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/03/2021 10:11
Project: Cerritos
Project Number: N043863
Project Manager: Sonny Lorenzo

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B098607										
Ammonia as N (Distilled)	B098607-BS1	LCS	1.9284	2.0000	mg/L	96.4		85 - 115		

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/03/2021 10:11
Project: Cerritos
Project Number: N043863
Project Manager: Sonny Lorenzo

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B098607	Used client sample: Y - Description: N043863-001G / EFF-01-22-21, 01/22/2021 12:55										
Ammonia as N (Distilled)	DUP	2102653-01	0.080568	ND		mg/L			20		
	MS	2102653-01	0.080568	2.4015	2.3715	mg/L		97.9		80 - 120	
	MSD	2102653-01	0.080568	2.4300	2.3715	mg/L	1.2	99.1	20	80 - 120	

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/03/2021 10:11
Project: Cerritos
Project Number: N043863
Project Manager: Sonny Lorenzo

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit

WECK LABORATORIES, INC.

Certificate of Analysis

FINAL REPORT

Work Orders: 1A22065

Project: SFPP Norwalk

Attn: Sonny Lorenzo

Client: Asset Laboratories
11110 Artesia Blvd., Ste B
Cerritos, CA 90703

Report Date: 2/03/2021
Received Date: 1/22/2021
Turnaround Time: Normal
Phones: (562) 219-7435
Fax: (562) 219-7436
P.O. #: N43863A
Billing Code:

Dear Sonny Lorenzo,

Enclosed are the results of analyses for samples received 1/22/21 with the Chain-of-Custody document. The samples were received in good condition, at 17.4 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Sample Results

Sample: EFF-01-22-21 — Sampled: 01/22/21 12:55 by James Dye

1A22065-01 (Water)

Analyte	Result	MDL	MRL	Units	Dil	Analyzed	Qualifier
Method: SM 5210B			**Instr:** PH13				
Batch ID: W1A1112 **Preparation:** _NONE (WETCHEM)			**Prepared:** 01/22/21 16:51				**Analyst:** SSI
Biochemical Oxygen Demand	ND	2.0	2.0	mg/l	1	01/27/21	

14859 Clark Avenue,City of Industry CA, 91745 | Phone: (626) 336-2139 | Fax: (626) 336-2634
www.wecklabs.com

Quality Control Results

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Analyte	Result	MDL	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Blank (W1A1112-BLK1)					**Prepared: 01/22/21**	**Analyzed: 01/27/21**					
Biochemical Oxygen Demand	ND	2.0	2.0	mg/l							
Blank (W1A1112-BLK2)					**Prepared: 01/22/21**	**Analyzed: 01/27/21**					
Biochemical Oxygen Demand	ND	2.0	2.0	mg/l							
LCS (W1A1112-BS1)					**Prepared: 01/22/21**	**Analyzed: 01/27/21**					
Biochemical Oxygen Demand	195	2.0	2.0	mg/l	198		98	85-115			
Duplicate (W1A1112-DUP1)	**Source: 1A21076-01**				**Prepared: 01/22/21**	**Analyzed: 01/27/21**					
Biochemical Oxygen Demand	4.40	2.0	2.0	mg/l		*4.28*			3	20	

14859 Clark Avenue,City of Industry CA, 91745 | Phone: (626) 336-2139 | Fax: (626) 336-2634

www.wecklabs.com

Notes and Definitions

Item	Definition
%REC	Percent Recovery
Dil	Dilution
MDL	Method Detection Limit
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ)
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
RPD	Relative Percent Difference
Source	Sample that was matrix spiked or duplicated.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.

Reviewed by:

Regina M. Giancola
Project Manager

DoD-ISO ANAB # ● ELAP-CA #1132 ● EPA-UCMR #CA00211 ● ISO17025 ANAB #L2457.01 ● LACSD #10143 ● NJ-DEP #CA015

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

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www.wecklabs.com

February 10, 2021

Eric Davis
CH2MHill
1000 Wilshire Blvd.
Los Angeles, CA 90017

TEL:
FAX:

Workorder No.: N044016

RE: SFPP Norwalk

Attention: Eric Davis

Enclosed are the results for sample(s) received on February 02, 2021 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

for

Nancy Sibucao
Laboratory Director

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Results were J-Flag. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" Flagged are estimated values since it becomes difficult to accurately quantitate the analyte near the MDL.

BOD and Ammonia was subcontracted to BC Laboratories, Bakersfield CA

Analytical Comments for EPA 8270C SIM:

Surrogate recovery was below the laboratory acceptable limit. Re extraction & reanalysis confirms low recovery caused by matrix effect.

Analytical comments for EPA 200.8:

RPD for Sample Duplicate (DUP) N044016-001D-DUP is outside criteria on analyte Zinc; however, the Laboratory Control Sample (LCS) validated the analytical batch.

Analytical comments for EPA 8260B:

Matrix Spike (MS) is outside recovery criteria on analyte Tert-Butanol possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

CLIENT: CH2MHill
Project: SFPP Norwalk
Lab Order: N044016
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N044016-001A	EFF-020221	Wastewater	2/2/2021 10:50:00 AM	2/2/2021	2/10/2021
N044016-001B	EFF-020221	Wastewater	2/2/2021 10:50:00 AM	2/2/2021	2/10/2021
N044016-001C	EFF-020221	Wastewater	2/2/2021 10:50:00 AM	2/2/2021	2/10/2021
N044016-001D	EFF-020221	Wastewater	2/2/2021 10:50:00 AM	2/2/2021	2/10/2021
N044016-001E	EFF-020221	Wastewater	2/2/2021 10:50:00 AM	2/2/2021	2/10/2021
N044016-001F	EFF-020221	Wastewater	2/2/2021 10:50:00 AM	2/2/2021	2/10/2021
N044016-001G	EFF-020221	Wastewater	2/2/2021 10:50:00 AM	2/2/2021	2/10/2021
N044016-001H	EFF-020221	Wastewater	2/2/2021 10:50:00 AM	2/2/2021	2/10/2021
N044016-001I	EFF-020221	Wastewater	2/2/2021 10:50:00 AM	2/2/2021	2/10/2021
N044016-001J	EFF-020221	Wastewater	2/2/2021 10:50:00 AM	2/2/2021	2/10/2021
N044016-001K	EFF-020221	Wastewater	2/2/2021 10:50:00 AM	2/2/2021	2/10/2021

CLIENT:	CH2MHill	**Client Sample ID:**	EFF-020221
Lab Order:	N044016	**Collection Date:**	2/2/2021 10:50:00 AM
Project:	SFPP Norwalk	**Matrix:**	WASTEWATER
Lab ID:	N044016-001		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
TOTAL NON-FILTERABLE RESIDUE							
			SM2540D				
RunID: **CA01638-WC01_210203A** QC Batch: **85121**				PrepDate:		**2/3/2021**	Analyst: **AG**
Suspended Solids (Residue, Non-Filterable)	ND	5.0	5.0		mg/L	1	2/3/2021 09:05 AM
SETTLEABLE MATTER							
			SM2540F				
RunID: **NV00922-WC_210203D** QC Batch: **85108**				PrepDate:		**2/3/2021**	Analyst: **LR**
Settleable Matter	ND	0.086	0.086		ml/L	1	2/3/2021 02:35 PM
TURBIDITY							
			SM 2130B				
RunID: **NV00922-WC_210203E** QC Batch: **R150503**				PrepDate:			Analyst: **LR**
Turbidity	0.49	0.10	0.10		NTU	1	2/3/2021 03:30 PM
HEXANE EXTRACTABLE MATERIAL (HEM)							
			EPA 1664 _HEM REV B				
RunID: **NV00922-WC_210204C** QC Batch: **85117**				PrepDate:		**2/4/2021**	Analyst: **LR**
Oil & Grease	ND	0.57	4.0		mg/L	1	2/4/2021 10:14 AM
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 3510C				**EPA 8270C**
RunID: **NV00922-MS3_210205A** QC Batch: **85136**				PrepDate:		**2/5/2021**	Analyst: **PL**
Phenol	ND	0.33	1.0		µg/L	1	2/5/2021 03:55 PM
Surr: Phenol-d5	21.0	0	25-108	S	%REC	1	2/5/2021 03:55 PM
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **CA01638-MS08_210203A** QC Batch: **R21VW007**				PrepDate:			Analyst: **AW**
1,1-Dichloroethane	ND	0.22	0.50		ug/L	1	2/3/2021 11:48 AM
1,2-Dichloroethane	ND	0.16	0.50		ug/L	1	2/3/2021 11:48 AM
Benzene	ND	0.11	1.0		ug/L	1	2/3/2021 11:48 AM
Ethylbenzene	ND	0.11	1.0		ug/L	1	2/3/2021 11:48 AM
m,p-Xylene	ND	0.23	1.0		ug/L	1	2/3/2021 11:48 AM
MTBE	ND	0.44	1.0		ug/L	1	2/3/2021 11:48 AM
o-Xylene	ND	0.087	1.0		ug/L	1	2/3/2021 11:48 AM
Tert-Butanol	ND	2.8	5.0		ug/L	1	2/3/2021 11:48 AM
Toluene	ND	0.13	2.0		ug/L	1	2/3/2021 11:48 AM
Xylenes, Total	ND	1.5	2.0		ug/L	1	2/3/2021 11:48 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified	DO	Surrogate Diluted Out

CLIENT: CH2MHill
Lab Order: N044016
Project: SFPP Norwalk
Lab ID: N044016-001

Client Sample ID: EFF-020221
Collection Date: 2/2/2021 10:50:00 AM
Matrix: WASTEWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **CA01638-MS08_210203A** QC Batch: **R21VW007**				PrepDate:			Analyst: **AW**
Surr: 1,2-Dichloroethane-d4	93.6	0	72-119		%REC	1	2/3/2021 11:48 AM
Surr: 4-Bromofluorobenzene	91.8	0	76-119		%REC	1	2/3/2021 11:48 AM
Surr: Dibromofluoromethane	97.8	0	85-115		%REC	1	2/3/2021 11:48 AM
Surr: Toluene-d8	100	0	81-120		%REC	1	2/3/2021 11:48 AM
TPH EXTRACTABLE BY GC/FID							
	EPA 3510C		**EPA 8015B**				
RunID: **NV00922-GC3_210203A** QC Batch: **85101**				PrepDate:		**2/3/2021**	Analyst: **LLR**
TPH-Diesel (C13-C22)	ND	15	25		ug/L	1	2/3/2021 04:20 PM
TPH-Oil (C23-C36)	32	14	25		ug/L	1	2/3/2021 04:20 PM
Surr: Octacosane	83.2	0	26-152		%REC	1	2/3/2021 04:20 PM
Surr: p-Terphenyl	84.8	0	57-132		%REC	1	2/3/2021 04:20 PM
GASOLINE RANGE ORGANICS BY GC/FID							
			EPA 8015B				
RunID: **NV00922-GC4_210203A** QC Batch: **E21VW013**				PrepDate:			Analyst: **BH**
TPH-Gasoline (C4-C12)	33	21	50	J	ug/L	1	2/3/2021 01:06 PM
Surr: Chlorobenzene - d5	110	0	74-138		%REC	1	2/3/2021 01:06 PM
MERCURY BY COLD VAPOR TECHNIQUE							
			EPA 245.1				
RunID: **NV00922-AA2_210203B** QC Batch: **85098**				PrepDate:		**2/3/2021**	Analyst: **DJ**
Mercury	0.036	0.018	0.050	J	µg/L	1	2/3/2021 12:15 PM
TOTAL METALS BY ICPMS							
			EPA 200.8				
RunID: **NV00922-ICP8_210203A** QC Batch: **85099**				PrepDate:		**2/3/2021**	Analyst: **CEI**
Copper	ND	0.26	0.50		µg/L	1	2/3/2021 04:40 PM
Lead	ND	0.13	0.50		µg/L	1	2/3/2021 04:40 PM
Zinc	0.95	0.27	1.0	J	µg/L	1	2/3/2021 04:40 PM
TOTAL TPH							
			EPA 8015B				
RunID: **NV00922-GC3_210203A** QC Batch: **R150517**				PrepDate:			Analyst: **LLR**
Total TPH	65	21	100	J	ug/L	1	2/3/2021

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified	DO	Surrogate Diluted Out

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 160.2_2540D_W

Sample ID: **MB-85121**	SampType: **MBLK**	TestCode: **160.2_2540D_**	Units: **mg/L**	Prep Date: **2/3/2021**	RunNo: **150532**
Client ID: **PBW**	Batch ID: **85121**	TestNo: **SM2540D**		Analysis Date: **2/3/2021**	SeqNo: **4098770**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filterab	ND	10									

Sample ID: **LCS-85121**	SampType: **LCS**	TestCode: **160.2_2540D_**	Units: **mg/L**	Prep Date: **2/3/2021**	RunNo: **150532**
Client ID: **LCSW**	Batch ID: **85121**	TestNo: **SM2540D**		Analysis Date: **2/3/2021**	SeqNo: **4098771**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filterab	938.000	10	1000	0	93.8	80	120				

Sample ID: **N044016-001GDUP**	SampType: **DUP**	TestCode: **160.2_2540D_**	Units: **mg/L**	Prep Date: **2/3/2021**	RunNo: **150532**
Client ID: **ZZZZZZ**	Batch ID: **85121**	TestNo: **SM2540D**		Analysis Date: **2/3/2021**	SeqNo: **4098779**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Suspended Solids (Residue, Non-Filterab	ND	5.0						0	0	5	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 160.5_2540F_W

Sample ID: **MB-85108**	SampType: **MBLK**	TestCode: **160.5_2540F_**	Units: **ml/L**		Prep Date: **2/3/2021**		RunNo: **150502**					
Client ID: **PBW**	Batch ID: **85108**	TestNo: **SM2540F**			Analysis Date: **2/3/2021**		SeqNo: **4097111**					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Settleable Matter	ND	0.10										

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 1664_HEM_W

Sample ID: **MB-85117**	SampType: **MBLK**	TestCode: **1664_HEM_W**	Units: **mg/L**	Prep Date: **2/4/2021**	RunNo: **150534**
Client ID: **PBW**	Batch ID: **85117**	TestNo: **EPA 1664 _HE**		Analysis Date: **2/4/2021**	SeqNo: **4098800**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease	ND	4.0									

Sample ID: **LCS-85117**	SampType: **LCS**	TestCode: **1664_HEM_W**	Units: **mg/L**	Prep Date: **2/4/2021**	RunNo: **150534**
Client ID: **LCSW**	Batch ID: **85117**	TestNo: **EPA 1664 _HE**		Analysis Date: **2/4/2021**	SeqNo: **4098801**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease	35.000	4.0	40.00	0	87.5	78	114				

Sample ID: **N044031-001EMS**	SampType: **MS**	TestCode: **1664_HEM_W**	Units: **mg/L**	Prep Date: **2/4/2021**	RunNo: **150534**
Client ID: **ZZZZZZ**	Batch ID: **85117**	TestNo: **EPA 1664 _HE**		Analysis Date: **2/4/2021**	SeqNo: **4098817**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease	37.245	4.1	40.82	0.8000	89.3	78	114				

Sample ID: **N044031-001EMSD**	SampType: **MSD**	TestCode: **1664_HEM_W**	Units: **mg/L**	Prep Date: **2/4/2021**	RunNo: **150534**
Client ID: **ZZZZZZ**	Batch ID: **85117**	TestNo: **EPA 1664 _HE**		Analysis Date: **2/4/2021**	SeqNo: **4098818**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Oil & Grease	39.700	4.0	40.00	0.8000	97.3	78	114	37.24	6.38	18	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W_SFPP

Sample ID: **MB-85099**	SampType: **MBLK**	TestCode: **200.8_W_SFP**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150523**
Client ID: **PBW**	Batch ID: **85099**	TestNo: **EPA 200.8**		Analysis Date: **2/3/2021**	SeqNo: **4098097**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.50									
Lead	ND	0.50									
Zinc	ND	1.0									

Sample ID: **LCS-85099**	SampType: **LCS**	TestCode: **200.8_W_SFP**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150523**
Client ID: **LCSW**	Batch ID: **85099**	TestNo: **EPA 200.8**		Analysis Date: **2/3/2021**	SeqNo: **4098098**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	9.424	0.50	10.00	0	94.2	85	115				
Lead	9.813	0.50	10.00	0	98.1	85	115				
Zinc	90.851	1.0	100.0	0	90.9	85	115				

Sample ID: **N044016-001D-DUP**	SampType: **DUP**	TestCode: **200.8_W_SFP**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150523**
Client ID: **ZZZZZZ**	Batch ID: **85099**	TestNo: **EPA 200.8**		Analysis Date: **2/3/2021**	SeqNo: **4098101**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.50						0	0	20	
Lead	ND	0.50						0	0	20	
Zinc	1.863	1.0						0.9507	64.8	20	R

Sample ID: **N044016-001D-MS**	SampType: **MS**	TestCode: **200.8_W_SFP**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150523**
Client ID: **ZZZZZZ**	Batch ID: **85099**	TestNo: **EPA 200.8**		Analysis Date: **2/3/2021**	SeqNo: **4098103**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	7.910	0.50	10.00	0	79.1	75	125				
Lead	10.062	0.50	10.00	0	101	75	125				
Zinc	76.237	1.0	100.0	0.9507	75.3	75	125				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W_SFPP

Sample ID: **N044016-001D-MSD** SampType: **MSD** TestCode: **200.8_W_SFP** Units: **µg/L** Prep Date: **2/3/2021** RunNo: **150523**
Client ID: **ZZZZZZ** Batch ID: **85099** TestNo: **EPA 200.8** Analysis Date: **2/3/2021** SeqNo: **4098104**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	7.988	0.50	10.00	0	79.9	75	125	7.910	0.973	20	
Lead	9.869	0.50	10.00	0	98.7	75	125	10.06	1.94	20	
Zinc	76.497	1.0	100.0	0.9507	75.5	75	125	76.24	0.340	20	

Qualifiers:

B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 2130_W

Sample ID: **MB-R150503**	SampType: **MBLK**	TestCode: **2130_W**	Units: **NTU**	Prep Date:	RunNo: **150503**
Client ID: **PBW**	Batch ID: **R150503**	TestNo: **SM 2130B**		Analysis Date: **2/3/2021**	SeqNo: **4097113**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Turbidity	ND	0.10									

Sample ID: **N044016-001KDUP**	SampType: **DUP**	TestCode: **2130_W**	Units: **NTU**	Prep Date:	RunNo: **150503**
Client ID: **ZZZZZZ**	Batch ID: **R150503**	TestNo: **SM 2130B**		Analysis Date: **2/3/2021**	SeqNo: **4097115**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Turbidity	0.450	0.10						0.4900	8.51	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 245.1_W_LL

Sample ID: **MB-85098**	SampType: **MBLK**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150493**
Client ID: **PBW**	Batch ID: **85098**	TestNo: **EPA 245.1**		Analysis Date: **2/3/2021**	SeqNo: **4096919**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.041	0.050									J

Sample ID: **LCS-85098**	SampType: **LCS**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150493**
Client ID: **LCSW**	Batch ID: **85098**	TestNo: **EPA 245.1**		Analysis Date: **2/3/2021**	SeqNo: **4096920**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.550	0.050	2.500	0	102	85	115				

Sample ID: **N044016-001D-DUP**	SampType: **DUP**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150493**
Client ID: **ZZZZZZ**	Batch ID: **85098**	TestNo: **EPA 245.1**		Analysis Date: **2/3/2021**	SeqNo: **4096923**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.050						0.03600	0	20	

Sample ID: **N044016-001D-MS**	SampType: **MS**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150493**
Client ID: **ZZZZZZ**	Batch ID: **85098**	TestNo: **EPA 245.1**		Analysis Date: **2/3/2021**	SeqNo: **4096925**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.500	0.050	2.500	0.03600	98.6	75	125				

Sample ID: **N044016-001D-MSD**	SampType: **MSD**	TestCode: **245.1_W_LL**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150493**
Client ID: **ZZZZZZ**	Batch ID: **85098**	TestNo: **EPA 245.1**		Analysis Date: **2/3/2021**	SeqNo: **4096926**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.490	0.050	2.500	0.03600	98.2	75	125	2.500	0.401	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_FP_SFPP

Sample ID: **MB1-85101**	SampType: **MBLK**	TestCode: **8015_W_FP_**	Units: **ug/L**	Prep Date: **2/3/2021**	RunNo: **150517**
Client ID: **PBW**	Batch ID: **85101**	TestNo: **EPA 8015B**	**EPA 3510C**	Analysis Date: **2/3/2021**	SeqNo: **4097918**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Diesel (C13-C22)	ND	25									
TPH-Oil (C23-C36)	ND	25									
Surr: Octacosane	73.233		80.00		91.5	26	152				
Surr: p-Terphenyl	76.219		80.00		95.3	57	132				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_SFPPTOT

Sample ID: **MB-R150517** SampType: **MBLK** TestCode: **8015_W_SFP** Units: **ug/L** Prep Date: RunNo: **150517**
Client ID: **PBW** Batch ID: **R150517** TestNo: **EPA 8015B** Analysis Date: **2/3/2021** SeqNo: **4098160**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total TPH	32.000	100									J

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **E210203LCS** SampType: **LCS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150512**
Client ID: **LCSW** Batch ID: **E21VW013** TestNo: **EPA 8015B** Analysis Date: **2/3/2021** SeqNo: **4097525**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	956.000	50	1000	0	95.6	67	136				
Surr: Chlorobenzene - d5	48253.000		50000		96.5	74	138				

Sample ID: **E210203LCSD** SampType: **LCSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150512**
Client ID: **LCSS02** Batch ID: **E21VW013** TestNo: **EPA 8015B** Analysis Date: **2/3/2021** SeqNo: **4097526**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	861.000	50	1000	0	86.1	67	136	956.0	10.5	30	
Surr: Chlorobenzene - d5	46833.000		50000		93.7	74	138		0	0	

Sample ID: **E210203MB** SampType: **MBLK** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150512**
Client ID: **PBW** Batch ID: **E21VW013** TestNo: **EPA 8015B** Analysis Date: **2/3/2021** SeqNo: **4097527**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	32.000	50									J
Surr: Chlorobenzene - d5	53284.000		50000		107	74	138				

Sample ID: **N044016-001BMS** SampType: **MS** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150512**
Client ID: **ZZZZZZ** Batch ID: **E21VW013** TestNo: **EPA 8015B** Analysis Date: **2/3/2021** SeqNo: **4097529**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	1028.000	50	1000	33.00	99.5	67	136				
Surr: Chlorobenzene - d5	50011.000		50000		100	74	138				

Sample ID: **N044016-001BMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150512**
Client ID: **ZZZZZZ** Batch ID: **E21VW013** TestNo: **EPA 8015B** Analysis Date: **2/3/2021** SeqNo: **4097530**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-Gasoline (C4-C12)	1035.000	50	1000	33.00	100	67	136	1028	0.679	30	

Qualifiers:

B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_WSFPP

Sample ID: **N044016-001BMSD** SampType: **MSD** TestCode: **8015GAS_WS** Units: **ug/L** Prep Date: RunNo: **150512**
Client ID: **ZZZZZZ** Batch ID: **E21VW013** TestNo: **EPA 8015B** Analysis Date: **2/3/2021** SeqNo: **4097530**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Chlorobenzene - d5	53958.000		50000		108	74	138		0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **R210203-LCS** SampType: **LCS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150507**
Client ID: **LCSW** Batch ID: **R21VW007** TestNo: **EPA 8260B** Analysis Date: **2/3/2021** SeqNo: **4097282**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	18.980	0.50	20.00	0	94.9	69	133				
1,2-Dichloroethane	20.000	0.50	20.00	0	100	69	132				
Benzene	19.340	1.0	20.00	0	96.7	81	122				
Ethylbenzene	19.660	1.0	20.00	0	98.3	73	127				
m,p-Xylene	41.290	1.0	40.00	0	103	76	128				
MTBE	18.940	1.0	20.00	0	94.7	65	123				
o-Xylene	19.120	1.0	20.00	0	95.6	80	121				
Tert-Butanol	88.120	5.0	100.0	0	88.1	70	130				
Toluene	19.740	2.0	20.00	0	98.7	77	122				
Xylenes, Total	60.410	2.0	60.00	0	101	75	125				
Surr: 1,2-Dichloroethane-d4	24.680		25.00		98.7	72	119				
Surr: 4-Bromofluorobenzene	23.990		25.00		96.0	76	119				
Surr: Dibromofluoromethane	25.050		25.00		100	85	115				
Surr: Toluene-d8	25.010		25.00		100	81	120				

Sample ID: **N044016-001A-MS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150507**
Client ID: **ZZZZZZ** Batch ID: **R21VW007** TestNo: **EPA 8260B** Analysis Date: **2/3/2021** SeqNo: **4097283**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	17.680	0.50	20.00	0	88.4	69	133				
1,2-Dichloroethane	18.210	0.50	20.00	0	91.1	69	132				
Benzene	18.420	1.0	20.00	0	92.1	81	122				
Ethylbenzene	19.640	1.0	20.00	0	98.2	73	127				
m,p-Xylene	41.190	1.0	40.00	0	103	76	128				
MTBE	14.890	1.0	20.00	0	74.4	65	123				
o-Xylene	18.970	1.0	20.00	0	94.8	80	121				
Tert-Butanol	63.330	5.0	100.0	0	63.3	70	130				S
Toluene	18.800	2.0	20.00	0	94.0	77	122				
Xylenes, Total	60.160	2.0	60.00	0	100	75	125				
Surr: 1,2-Dichloroethane-d4	22.120		25.00		88.5	72	119				

Qualifiers:

B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **N044016-001A-MS** SampType: **MS** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150507**
Client ID: **ZZZZZZ** Batch ID: **R21VW007** TestNo: **EPA 8260B** Analysis Date: **2/3/2021** SeqNo: **4097283**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	23.420		25.00		93.7	76	119				
Surr: Dibromofluoromethane	22.450		25.00		89.8	85	115				
Surr: Toluene-d8	23.700		25.00		94.8	81	120				

Sample ID: **N044016-001A-MSD** SampType: **MSD** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150507**
Client ID: **ZZZZZZ** Batch ID: **R21VW007** TestNo: **EPA 8260B** Analysis Date: **2/3/2021** SeqNo: **4097284**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	17.980	0.50	20.00	0	89.9	69	133	17.68	1.68	20	
1,2-Dichloroethane	18.880	0.50	20.00	0	94.4	69	132	18.21	3.61	20	
Benzene	19.020	1.0	20.00	0	95.1	81	122	18.42	3.21	20	
Ethylbenzene	19.790	1.0	20.00	0	99.0	73	127	19.64	0.761	20	
m,p-Xylene	41.430	1.0	40.00	0	104	76	128	41.19	0.581	20	
MTBE	16.570	1.0	20.00	0	82.8	65	123	14.89	10.7	20	
o-Xylene	19.040	1.0	20.00	0	95.2	80	121	18.97	0.368	20	
Tert-Butanol	71.660	5.0	100.0	0	71.7	70	130	63.33	12.3	20	
Toluene	19.460	2.0	20.00	0	97.3	77	122	18.80	3.45	20	
Xylenes, Total	60.470	2.0	60.00	0	101	75	125	60.16	0.514	20	
Surr: 1,2-Dichloroethane-d4	23.100		25.00		92.4	72	119		0		
Surr: 4-Bromofluorobenzene	24.340		25.00		97.4	76	119		0		
Surr: Dibromofluoromethane	23.730		25.00		94.9	85	115		0		
Surr: Toluene-d8	25.770		25.00		103	81	120		0		

Sample ID: **R210203-MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150507**
Client ID: **PBW** Batch ID: **R21VW007** TestNo: **EPA 8260B** Analysis Date: **2/3/2021** SeqNo: **4097287**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	ND	0.50									
1,2-Dichloroethane	ND	0.50									
Benzene	ND	1.0									

Qualifiers:

B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_SFPP

Sample ID: **R210203-MB3** SampType: **MBLK** TestCode: **8260_WP_SF** Units: **ug/L** Prep Date: RunNo: **150507**
Client ID: **PBW** Batch ID: **R21VW007** TestNo: **EPA 8260B** Analysis Date: **2/3/2021** SeqNo: **4097287**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0									
m,p-Xylene	ND	1.0									
MTBE	ND	1.0									
o-Xylene	ND	1.0									
Tert-Butanol	ND	5.0									
Toluene	ND	2.0									
Xylenes, Total	ND	2.0									
Surr: 1,2-Dichloroethane-d4	22.850		25.00		91.4	72	119				
Surr: 4-Bromofluorobenzene	21.390		25.00		85.6	76	119				
Surr: Dibromofluoromethane	22.760		25.00		91.0	85	115				
Surr: Toluene-d8	22.890		25.00		91.6	81	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270WATER_SIMEXT

Sample ID: **LCS-85104**	SampType: **LCS**	TestCode: **8270WATER_**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150535**
Client ID: **LCSW**	Batch ID: **85104**	TestNo: **EPA 8270C**	**EPA 3510C**	Analysis Date: **2/4/2021**	SeqNo: **4098824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1.740	1.0	6.000	0	29.0	24	120				
Surr: Phenol-d5	0.270		1.000		27.0	25	108				

Sample ID: **LCSD-85104**	SampType: **LCSD**	TestCode: **8270WATER_**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150535**
Client ID: **LCSS02**	Batch ID: **85104**	TestNo: **EPA 8270C**	**EPA 3510C**	Analysis Date: **2/4/2021**	SeqNo: **4098825**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1.740	1.0	6.000	0	29.0	24	120	1.740	0	20	
Surr: Phenol-d5	0.270		1.000		27.0	25	108		0		

Sample ID: **MB-85104**	SampType: **MBLK**	TestCode: **8270WATER_**	Units: **µg/L**	Prep Date: **2/3/2021**	RunNo: **150535**
Client ID: **PBW**	Batch ID: **85104**	TestNo: **EPA 8270C**	**EPA 3510C**	Analysis Date: **2/4/2021**	SeqNo: **4098826**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	1.0									
Surr: Phenol-d5	0.270		1.000		27.0	25	108				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

CLIENT: CH2MHill
Work Order: N044016
Project: SFPP Norwalk

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270WATER_SIMEXT

Sample ID: **LCS-85136** SampType: **LCS** TestCode: **8270WATER_** Units: **µg/L** Prep Date: **2/5/2021** RunNo: **150576**
Client ID: **LCSW** Batch ID: **85136** TestNo: **EPA 8270C** **EPA 3510C** Analysis Date: **2/5/2021** SeqNo: **4100640**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1.800	1.0	6.000	0	30.0	24	120				
Surr: Phenol-d5	0.270		1.000		27.0	25	108				

Sample ID: **LCSD-85136** SampType: **LCSD** TestCode: **8270WATER_** Units: **µg/L** Prep Date: **2/5/2021** RunNo: **150576**
Client ID: **LCSS02** Batch ID: **85136** TestNo: **EPA 8270C** **EPA 3510C** Analysis Date: **2/5/2021** SeqNo: **4100641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1.860	1.0	6.000	0	31.0	24	120	1.800	3.28	20	
Surr: Phenol-d5	0.290		1.000		29.0	25	108		0		

Sample ID: **MB-85136** SampType: **MBLK** TestCode: **8270WATER_** Units: **µg/L** Prep Date: **2/5/2021** RunNo: **150576**
Client ID: **PBW** Batch ID: **85136** TestNo: **EPA 8270C** **EPA 3510C** Analysis Date: **2/5/2021** SeqNo: **4100642**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	1.0									
Surr: Phenol-d5	0.280		1.000		28.0	25	108				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike/Surrogate outside of limits due to matrix interference	DO	Surrogate Diluted Out		Calculations are based on raw values

N044016

Asset Laboratories
3151 W. Post Road
Las Vegas, NV 89118
Tel: 702-307-2659 Fax: 702-307-2691
Marlon Cartin (marlon@assetlaboratories.com)

CHAIN OF CUSTODY RECORD

DATE: 2/2/21
PAGE: 1 of 1

Section A Required Client Information:		Section B Required Project Information:	Section C Invoice Information:		Section D Sampler Information:	
Company: Kinder Morgan Energy Partners		Report To: Eric Davis	Attention:	Court Reece - Ref. AFE# 81195	Sampler Name:	James Dye
Address: 1001 Louisiana St., Houston, TX 77002		Copy To: Court Reece	Company Name:	Kinder Morgan Energy Partners	Sampler Signature:	
Email To: Court_Reece@kindermorgan.com eric.davis@kindermorgan.com nils.gritzky@kindermorgan.com		Purchase Order No.:	Address:	1001 Louisiana St., Houston, TX 77002	Sample Date:	2/2/21
Phone 713-420-6730	Fax 714-560-4801	Project Name: SFPP Norwalk	ATI Project Manager:	Marlon Cartin		

Section E Required Sample Information

ITEM #	SAMPLE ID	LOCATION/ DESCRIPTION	MATRIX	SAMPLE TYPE (G=GRAB C=COMP)	SAMPLING DATE	SAMPLING TIME	TOTAL # OF CONTAINERS	Analysis Test: BTEX, 1,1-DCA, 1,2-DCA, MTBE, TBA (8260B)	TPH-gas (C6-C12) (8015B)	TPH-d (C13-C22), TPH-oil (C23+), Total TPH (8015B)	Cu, Pb, Zn (200.8); Hg (245.1)	Phenol (8270)	BOD (@ 20 deg. C)(SM5210B)	Total Suspended Solids (SM2540D); Turbidity (SM2130B)	Oil & Grease (1664)	Ammonia Nitrogen (as N) (SM 4500 NH3C)	Settleable Solids (SM2540F)	MS/MSD	Comments
	CONTAINER TYPE							V	V	A	P	A	P	P	G	P	P	A	
	# OF CONTAINERS							3	3	2	1	2	1	1	2	1	1	1	
	PRESERVATIVE							H	H	--	N	--	--	--	S	S	--	--	
	VOLUME (mL)							40	40	1000	500	1000	1000	1000	1000	500	1000	1000	
1	EFF-020221	EFFLUENT	WW	G	2/2/21	1050	18	X	X	X	X	X	X	X	X	X	X	X	N044016-01
2																			Report metals, TPH and VOC preliminary data on 24-hr TAT
3																			Report total Xylenes
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by (Signature and Printed Name):	Date / Time	Relinquished by (Signature and Printed Name):	Date / Time
	2/2/21 1200		2/2/21 1455
	2/2/21 1425		2/2/21 1425
A. DASILVA	2/2/21 1800	Belkys Hernandez BH	2/3/21 8:30am

COOLTOS 3.8°C IR#1 ICE/ COOLER

Turn Around Time (TAT):
- ☐A = Same Day
- ☑B = 24 Hours
- ☐C = 48 Hours
- ☐D = 72 Hours
- ☑E = 5 Workdays
- ☐F = 10 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00 PM.

Special Instructions:
Las Vegas
4.0°C / 3.8°C
Ice #2
GSO# 0221 / 0222

Matrix:		
W = Water	WW = Wastewater	
O = Oil	P = Product	S = Soil
Others/Specify:		

Preservatives:		
H = HCl	N = HNO3	S = H2SO4
Z = Zn(AC)2	O = NaOH	T = Na2S2O3
Others/Specify:		

Container Type:			
T = Tube	V = VOA	P = Pint	A = Amber
J = Jar	B = Tedlar	G = Glass	
M = Metal	P = Plastic	C = Can	

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	2/2/2021	Workorder:	N044016
Rep sample Temp (Deg C):	3.8	IR Gun ID:	1
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☑	No ☐	NA ☐
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments: Received at Las Vegas Lab on 2/3/21 at 4.0 oC/3.8 oC, IR# 2, GSO# 0221/0222.

For:

Checklist Completed By: TM BHdez 2/3/2021

Reviewed By: MBC 02/03/2021

Subject: RE: [ASSET#N044016] SFPP Norwalk
From: "Marlon Cartin" <marlon@assetlaboratories.com>
Date: 2/3/2021, 8:09 AM
To: "'Dye, James'" <James_Dye@kindermorgan.com>, "'Ashley Marie DaSilva'" <ashley@assetlaboratories.com>, "'Orliczky, Nils/SCO'" <Nils.Orliczky@jacobs.com>
CC: "'AssetLabs Sample Control'" <samplecontrol@assetlaboratories.com>, "'Yoandra Rodriguez'" <yoandra@assetlaboratories.com>, <maryann.balilu@assetlaboratoriesph.com>, "'Thad Malit'" <tmalit@assetlaboratories.com>

Hi James,

The extra bottles are for us to be able to run MS/MSD as part of the QA/QC prescribed by the analytical method.

Thanks,

Marlon Cartin
Sr. Project Manager
California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 I P: 562.219.7435 I F: 562.219.7436
Nevada: 3151 W. Post Road, Las Vegas, NV 89118 I P: 702.307.2659 Ext. 410 I F: 702.307.2691 I M: 702.439.0421
www.assetlaboratories.com

-----Original Message-----
From: Dye, James <James_Dye@kindermorgan.com>
Sent: Wednesday, February 3, 2021 6:47 AM
To: Ashley Marie DaSilva <ashley@assetlaboratories.com>; 'Orliczky, Nils/SCO (Nils.Orliczky@jacobs.com)' <Nils.Orliczky@jacobs.com>; Marlon Cartin <marlon@assetlaboratories.com>
Cc: AssetLabs Sample Control <samplecontrol@assetlaboratories.com>; 'Yoandra Rodriguez' <yoandra@assetlaboratories.com>; maryann.balilu@assetlaboratoriesph.com; Thad Malit <tmalit@assetlaboratories.com>
Subject: RE: [ASSET#N044016] SFPP Norwalk

I am not sure why you sent me the MS/MSD bottles. This is a question for Nils and Marlon

James Dye
Technician-EHS SR
2319 S. Riverside Ave
Bloomington, CA 92316
Cell (909) 631-0231

-----Original Message-----
From: Ashley Marie DaSilva <ashley@assetlaboratories.com>
Sent: Tuesday, February 2, 2021 4:27 PM
To: Dye, James <James_Dye@kindermorgan.com>
Cc: AssetLabs Sample Control <samplecontrol@assetlaboratories.com>; 'Yoandra Rodriguez' <yoandra@assetlaboratories.com>; maryann.balilu@assetlaboratoriesph.com; Thad Malit <tmalit@assetlaboratories.com>

Subject: [ASSET#N044016] SFPP Norwalk

Hi James,

For the above project, we received an extra container marked for "MS/MSD". Please confirm if you would like this tested for 8015.

Thank you!
Ashley DaSilva

ASSET Laboratories

WORK ORDER Summary

03-Feb-21

WorkOrder: N044016

Client ID: CH2HI03

Project: SFPP Norwalk **QC Level:** RTNE **Date Received:** 2/2/2021

Comments: Report metals, TPH and VOC preliminary data on 24-hr TAT

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N044016-001A	EFF-020221	2/2/2021 10:50:00 AM	2/4/2021	Wastewater	EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	V-CA
N044016-001B			2/4/2021		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	☐	☐	☐	VW
N044016-001C			2/4/2021		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	☐	☐	☐	WW
			2/4/2021		EPA 8015B	TPH EXTRACTABLE BY GC/FID	☐	☐	☐	WW
			2/4/2021		EPA 8015B	Total TPH	☐	☐	☐	WW
N044016-001D			2/4/2021			AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			2/4/2021		EPA 200.8	TOTAL METALS BY ICPMS	☐	☐	☐	WW
			2/4/2021		EPA 245.1	MERCURY BY COLD VAPOR TECHNIQUE	☐	☐	☐	WW
			2/4/2021			MERCURY PREP	☐	☐	☐	WW
N044016-001E			2/9/2021		EPA 3510C	SEPARATORY FUNNEL EXTRACTION: 8270C - SIM	☐	☐	☐	WW
			2/9/2021		EPA 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	WW
N044016-001F			2/9/2021		SM 5210 B	BIOCHEMICAL OXYGEN DEMAND	☐	☐	☑	SUB
N044016-001G			2/9/2021		SM2540D	TOTAL NON-FILTERABLE RESIDUE	☐	☐	☐	WW-CA
			2/9/2021			Total Suspended Solids Prep	☐	☐	☐	WW-CA
N044016-001H			2/9/2021			Oil and Grease Sample Prep	☐	☐	☐	WW
			2/9/2021		EPA 1664 _HEM Rev B	Hexane Extractable Material (HEM)	☐	☐	☐	WW
N044016-001I			2/9/2021		SM4500-NH3D	AMMONIA-N BY ION SELECTIVE ELECTRODE	☐	☐	☑	SUB
N044016-001J			2/9/2021		SM2540F	SETTLEABLE MATTER	☐	☐	☐	WW
			2/9/2021			Setteable Matter	☐	☐	☐	WW
N044016-001K			2/9/2021		SM 2130B	TURBIDITY	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

03-Feb-21

WorkOrder: N044016

Client ID: CH2HI03

Project: SFPP Norwalk **QC Level:** RTNE **Date Received:** 2/2/2021

Comments: Report metals, TPH and VOC preliminary data on 24-hr TAT

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N044016-002A	FOLDER	2/4/2021	2/4/2021		Folder	Folder	☐	☐	☐	LAB
			2/4/2021		Folder	Folder	☐	☐	☐	LAB

ASSET Laboratories
3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 *FAX: 7023072691*

CHAIN-OF-CUSTODY RECORD

QC Level: RTNE

Subcontractor:

BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: James Dye

02-Feb-21

				Requested Tests		
Sample ID	**Matrix**	**Date Collected**	**Bottle Type**	**SM 5210 B**	**SM4500-NH3D**	
N044016-001F / EFF-020221	Wastewater	2/2/2021 10:50:00 AM	32OZP	1		
N044016-001I / EFF-020221	Wastewater	2/2/2021 10:50:00 AM	16OZP		1	

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com

PO#:N44016A Please email invoices & statements to elvira@assetlaboratories.com. For questions, call Thad Malit at (562)-219-7435. RESULTS NEEDED: 02/09/21. EMAIL RESULTS TO: reports@assetlaboratories.com, sonny.lorenzo@assetlaboratories.com.

Please analyze samples for BOD (@20°C) by SM5210B and Ammonia Nitrogen (as N) by SM-4500 NH3C.

GSO#552120099

		Date/Time			Date/Time
Relinquished by:	Ashley DaSilva	02/02/21 1800	**Received by:**		
Relinquished by:			**Received by:**		

GLS

800-322-5555
www.gls-us.com

Ship From
ASSET LABORATORIES
THAD MALIT
11110 ARTESIA BLVD. SUITE B
CERRITOS, CA 90703

Ship To
ASSET LABORATORIES
MARLON CARTIN
3151 W. POST RD.,
LAS VEGAS, NV 89118

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:
HOLD FOR PICKUP
Signature Type: STANDARD

Tracking #: 552120221

CPS

LAS VEGAS

C89102A

35720761

LVS NV891-A 1

Print Date: 2/2/2021 4:55 PM

Package 1 of 2

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.
Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.
Step 2: Fold this page in half.
Step 3: Securely attach this label to your package and do not cover the barcode.

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gls-us.com.

4.0 C
8:30 am

GLS

800-322-5555
www.gls-us.com

Ship From
ASSET LABORATORIES
THAD MALIT
11110 ARTESIA BLVD. SUITE B
CERRITOS, CA 90703

Ship To
ASSET LABORATORIES
MARLON CARTIN
3151 W. POST RD.,
LAS VEGAS, NV 89118

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:
HOLD FOR PICKUP
Signature Type: STANDARD

Tracking #: 552120222

CPS

LAS VEGAS

C89102A

35720762

LVS NV891-A 1

Print Date: 2/2/2021 4:55 PM

Package 2 of 2

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.
Step 1: Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer.
Step 2: Fold this page in half.
Step 3: Securely attach this label to your package and do not cover the barcode.

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all of the General Logistics Systems US, Inc. (GLS) service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at www.gls-us.com.

3.8°C

Date of Report: 02/10/2021

Sonny Lorenzo

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Client Project:	N044016
BCL Project:	Cerritos
BCL Work Order:	2103504
Invoice ID:	B406411

Enclosed are the results of analyses for samples received by the laboratory on 2/3/2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Stuart Buttram
Technical Director

Table of Contents

Chain of Custody and Cooler Receipt Form for 2103504 Page 1 of 2

ASSET Laboratories **RUSH!** **CHAIN-OF-CUSTODY RECORD** Page 1 of 1

3151-3153 W Post Rd., Las Vegas, NV 89118
www.atl-labs.com
TEL: 7023072659 FAX: 7023072691

21-0504

QC Level: RTNE

Subcontractor:
BC Labs
4100 Atlas Court
Bakersfield, CA 93308

TEL: (661) 327-4911
FAX: (661) 327-1918
Acct #:

Field Sampler: James Dye

02-Feb-21

	Sample ID	Matrix	Date Collected	Bottle Type	Requested Tests		
					SM 5210 B	SM4500-NH3D	
-1	N044016-001F / EFF-020221	Wastewater	2/2/2021 10:50:00 AM	32OZP	1		
-2	N044016-001I / EFF-020221	Wastewater	2/2/2021 10:50:00 AM	16OZP		1	

SHORT HOLDING TIME
Cr^{+6} NO_2 NO_3 OP SS
DO Cl_2 BOD MBAS COT

CHK BY DISTRIBUTION
SUB OUT ☐

General Comments: PLEASE EMAIL SAMPLE RECEIPT ACKNOWLEDGEMENT TO THE PM. ALWAYS CC: sonny.lorenzo@assetlaboratories.com
PO#:N44016A Please email invoices & statements to elvira@assetlaboratories.com. For questions, call Thad Mailt at (562)-219-7435. RESULTS NEEDED: 02/09/21. EMAIL RESULTS TO: reports@assetlaboratories.com, sonny.lorenzo@assetlaboratories.com.
Please analyze samples for BOD (@20°C) by SM5210B and Ammonia Nitrogen (as N) by SM-4500 NH3C.

GSO#552120099

		Date/Time
Relinquished by:	Ashley DaSilva	02/02/21 1800
Relinquished by:		
Received by:		2-3-21 1003
Received by:		

Chain of Custody and Cooler Receipt Form for 2103504 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 1

Submission #: 21-03504

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐ BC Lab Field Service ☐ Other ☒ (Specify) GLS	Ice Chest ☒ None ☐ Box ☐ Other ☐ (Specify)	YES ☐ NO ☐ W / S

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ (Intact? Yes ☐ No ☐) Containers ☐ (Intact? Yes ☐ No ☐) None ☒ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 97 Container: PE Thermometer ID: 274 Date/Time 2-3-21 1005

Temperature: (A) 2.1 °C / (C) 1.9 °C Analyst Init TKS

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	A									
4oz / 8oz / 16oz PE UNPRES										
2oz Cr+6										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS		A								
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS					/					
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:

Sample Numbering Completed By: CAB Date/Time: 2/3/21 1220

A = Actual / C = Corrected

Rev 21 05/23/2016

I:\WPDocs\WordPerfect\LAB_DOCS\FORMS\SAMPREC rev 201

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/10/2021 8:59
Project: Cerritos
Project Number: N044016
Project Manager: Sonny Lorenzo

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2103504-01	**COC Number:**	---	**Receive Date:**	02/03/2021 10:05
	Project Number:	---	**Sampling Date:**	02/02/2021 10:50
	Sampling Location:	NA	**Sample Depth:**	---
	Sampling Point:	N044016-001F / EFF-020221	**Lab Matrix:**	Water
	Sampled By:	James Dye	**Sample Type:**	Wastewater
2103504-02	**COC Number:**	---	**Receive Date:**	02/03/2021 10:05
	Project Number:	---	**Sampling Date:**	02/02/2021 10:50
	Sampling Location:	NA	**Sample Depth:**	---
	Sampling Point:	N044016-001I / EFF-020221	**Lab Matrix:**	Water
	Sampled By:	James Dye	**Sample Type:**	Wastewater

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/10/2021 8:59
Project: Cerritos
Project Number: N044016
Project Manager: Sonny Lorenzo

Water Analysis (General Chemistry)

BCL Sample ID: 2103504-01 | **Client Sample Name:** NA, N044016-001F / EFF-020221, 2/2/2021 10:50:00AM, James Dye

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Biochemical Oxygen Demand - Seeded	ND	mg/L	1.5	SM17-5210B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	SM17-5210B	02/04/21 06:30	02/04/21 06:30	JT1	YSIPRO	1.525	B099524	No Prep

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/10/2021 8:59
Project: Cerritos
Project Number: N044016
Project Manager: Sonny Lorenzo

Water Analysis (General Chemistry)

BCL Sample ID: 2103504-02 | **Client Sample Name:** NA, N044016-001I / EFF-020221, 2/2/2021 10:50:00AM, James Dye

Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Ammonia as N (Distilled)	ND	mg/L	0.20	SM-4500-NH3G	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	SM-4500-NH3G	02/04/21 09:00	02/05/21 10:13	JMH2	SC-1	1.075	B099195	SM 4500-NH3G

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/10/2021 8:59
Project: Cerritos
Project Number: N044016
Project Manager: Sonny Lorenzo

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	Lab Quals
QC Batch ID: B099195					
Ammonia as N (Distilled)	B099195-BLK1	ND	mg/L	0.20	
QC Batch ID: B099524					
Biochemical Oxygen Demand - Seeded	B099524-BLK1	ND	mg/L	1.0	

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/10/2021 8:59
Project: Cerritos
Project Number: N044016
Project Manager: Sonny Lorenzo

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B099195										
Ammonia as N (Distilled)	B099195-BS1	LCS	1.9980	2.0000	mg/L	99.9		85 - 115		
QC Batch ID: B099524										
Biochemical Oxygen Demand - Seeded	B099524-BS1	LCS	183.00	198.00	mg/L	92.4		85 - 115		

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/10/2021 8:59
Project: Cerritos
Project Number: N044016
Project Manager: Sonny Lorenzo

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B099195	Used client sample: N										
Ammonia as N (Distilled)	DUP	2103228-03	0.14670	ND		mg/L			20		
	MS	2103228-03	0.14670	2.4451	2.3256	mg/L		98.8		80 - 120	
	MSD	2103228-03	0.14670	2.3947	2.3256	mg/L	2.1	96.7	20	80 - 120	
QC Batch ID: B099524	Used client sample: N										
Biochemical Oxygen Demand - Seeded	DUP	2103509-01	50.172	46.767		mg/L	7.0		20		

Asset Laboratories, Inc.-Cerritos
11110 Artesia Blvd., Suite B
Cerritos, CA 90703

Reported: 02/10/2021 8:59
Project: Cerritos
Project Number: N044016
Project Manager: Sonny Lorenzo

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-277950-1
Client Project/Site: KMEP/SFPP Norwalk Site

For:
CH2M Hill, Inc.
6 Hutton Centre Drive, Suite 700
Santa Ana, California 92707

Attn: Eric Davis

Authorized for release by:
2/4/2021 4:31:48 PM

Janice Hsu, Project Manager I
(949)260-3263
Janice.Hsu@Eurofinset.com

Table of Contents

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: KMEP/SFPP Norwalk Site

Job ID: 440-277950-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-277950-1	SG1-01252021-WW	Water	01/25/21 11:00	01/26/21 17:50	
440-277950-2	SG1-01252021-WD	Water	01/25/21 11:00	01/26/21 17:50	
440-277950-3	SG1-01252021-EB	Water	01/25/21 10:10	01/26/21 17:50	
440-277950-4	SG1-01252021-MS/MSD	Water	01/25/21 11:00	01/26/21 17:50	

Case Narrative

Client: CH2M Hill, Inc.
Project/Site: KMEP/SFPP Norwalk Site

Job ID: 440-277950-1

Job ID: 440-277950-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-277950-1

Comments
No additional comments.

Receipt
The samples were received on 1/26/2021 5:50 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.1º C, 0.4º C, 0.5º C and 0.5º C.

GC/MS Semi VOA
Method 8270C SIM: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 570-125585 and analytical batch 570-125942 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

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

GC Semi VOA
Method 8081A: The continuing calibration verification (CCV) associated with batch 570-126076 recovered above the upper control limit for <Mirex and 2,4'-DDT>. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8081A: Due to the high concentration of Endosulfan I, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 570-125869 and analytical batch 570-126076 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

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

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

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

Organic Prep
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-125585. The LCS/LCSD was preformed to meet QC requirements.

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

Client: CH2M Hill, Inc.
Project/Site: KMEP/SFPP Norwalk Site

Job ID: 440-277950-1

Client Sample ID: SG1-01252021-WW
Date Collected: 01/25/21 11:00
Date Received: 01/26/21 17:50

Lab Sample ID: 440-277950-1
Matrix: Water

Method: 8270C SIM - PAHs (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.19	0.069	ug/L		01/29/21 12:25	02/01/21 13:17	1
2-Methylnaphthalene	ND		0.19	0.073	ug/L		01/29/21 12:25	02/01/21 13:17	1
Acenaphthene	ND		0.19	0.092	ug/L		01/29/21 12:25	02/01/21 13:17	1
Acenaphthylene	ND		0.19	0.065	ug/L		01/29/21 12:25	02/01/21 13:17	1
Anthracene	ND		0.19	0.056	ug/L		01/29/21 12:25	02/01/21 13:17	1
Benzo[g,h,i]perylene	ND		0.19	0.095	ug/L		01/29/21 12:25	02/01/21 13:17	1
Benzo[k]fluoranthene	ND		0.19	0.088	ug/L		01/29/21 12:25	02/01/21 13:17	1
Benzo[a]anthracene	ND		0.19	0.081	ug/L		01/29/21 12:25	02/01/21 13:17	1
Benzo[a]pyrene	ND		0.19	0.059	ug/L		01/29/21 12:25	02/01/21 13:17	1
Benzo[b]fluoranthene	ND		0.19	0.11	ug/L		01/29/21 12:25	02/01/21 13:17	1
Chrysene	ND		0.19	0.056	ug/L		01/29/21 12:25	02/01/21 13:17	1
Dibenz(a,h)anthracene	ND		0.19	0.11	ug/L		01/29/21 12:25	02/01/21 13:17	1
Fluoranthene	ND		0.19	0.064	ug/L		01/29/21 12:25	02/01/21 13:17	1
Fluorene	ND		0.19	0.071	ug/L		01/29/21 12:25	02/01/21 13:17	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.10	ug/L		01/29/21 12:25	02/01/21 13:17	1
Naphthalene	ND		0.19	0.078	ug/L		01/29/21 12:25	02/01/21 13:17	1
Phenanthrene	ND		0.19	0.069	ug/L		01/29/21 12:25	02/01/21 13:17	1
Pyrene	ND		0.19	0.062	ug/L		01/29/21 12:25	02/01/21 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*97*		*33 - 144*	*01/29/21 12:25*	*02/01/21 13:17*	*1*
Nitrobenzene-d5 (Surr)	*94*		*28 - 139*	*01/29/21 12:25*	*02/01/21 13:17*	*1*
p-Terphenyl-d14 (Surr)	*71*		*23 - 160*	*01/29/21 12:25*	*02/01/21 13:17*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0094	0.0026	ug/L		02/01/21 05:40	02/02/21 09:30	1
4,4'-DDE	ND		0.0038	0.0016	ug/L		02/01/21 05:40	02/02/21 09:30	1
4,4'-DDT	ND		0.0094	0.0049	ug/L		02/01/21 05:40	02/02/21 09:30	1
Aldrin	ND		0.0094	0.0021	ug/L		02/01/21 05:40	02/02/21 09:30	1
alpha-BHC	ND		0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:30	1
alpha-Chlordane	ND		0.0038	0.0018	ug/L		02/01/21 05:40	02/02/21 09:30	1
beta-BHC	ND		0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:30	1
Chlordane	ND		0.019	0.0069	ug/L		02/01/21 05:40	02/02/21 09:30	1
delta-BHC	ND		0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:30	1
Dieldrin	ND		0.0094	0.0022	ug/L		02/01/21 05:40	02/02/21 09:30	1
Endosulfan I	**0.027**		0.0094	0.0023	ug/L		02/01/21 05:40	02/02/21 09:30	1
Endosulfan II	ND		0.0094	0.0020	ug/L		02/01/21 05:40	02/02/21 09:30	1
Endosulfan sulfate	ND		0.0094	0.0026	ug/L		02/01/21 05:40	02/02/21 09:30	1
Endrin	ND		0.0038	0.0019	ug/L		02/01/21 05:40	02/02/21 09:30	1
Endrin aldehyde	ND		0.019	0.0060	ug/L		02/01/21 05:40	02/02/21 09:30	1
Endrin ketone	ND		0.0094	0.0024	ug/L		02/01/21 05:40	02/02/21 09:30	1
gamma-Chlordane	ND		0.0094	0.0026	ug/L		02/01/21 05:40	02/02/21 09:30	1
gamma-BHC (Lindane)	ND		0.0038	0.0013	ug/L		02/01/21 05:40	02/02/21 09:30	1
Heptachlor	ND		0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:30	1
Heptachlor epoxide	ND		0.0038	0.0015	ug/L		02/01/21 05:40	02/02/21 09:30	1
Methoxychlor	ND		0.0094	0.0037	ug/L		02/01/21 05:40	02/02/21 09:30	1
Toxaphene	ND		0.057	0.027	ug/L		02/01/21 05:40	02/02/21 09:30	1
2,4'-DDT	ND		0.0038	0.0016	ug/L		02/01/21 05:40	02/02/21 09:30	1

Client Sample ID: SG1-01252021-WW

Date Collected: 01/25/21 11:00
Date Received: 01/26/21 17:50

Lab Sample ID: 440-277950-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*		*20 - 162*	*02/01/21 05:40*	*02/02/21 09:30*	*1*
DCB Decachlorobiphenyl (Surr)	*55*	*p*	*20 - 141*	*02/01/21 05:40*	*02/02/21 09:30*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 15:55	1
Aroclor-1221	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 15:55	1
Aroclor-1232	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 15:55	1
Aroclor-1242	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 15:55	1
Aroclor-1248	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 15:55	1
Aroclor-1254	ND		0.47	0.29	ug/L		01/29/21 16:08	02/01/21 15:55	1
Aroclor-1260	ND		0.47	0.29	ug/L		01/29/21 16:08	02/01/21 15:55	1
Aroclor-1262	ND		0.47	0.29	ug/L		01/29/21 16:08	02/01/21 15:55	1
Aroclor-1268	ND		0.47	0.29	ug/L		01/29/21 16:08	02/01/21 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*72*		*20 - 139*	*01/29/21 16:08*	*02/01/21 15:55*	*1*
DCB Decachlorobiphenyl (Surr)	*59*		*20 - 154*	*01/29/21 16:08*	*02/01/21 15:55*	*1*

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	**8.9**		0.50	0.50	ug/L		01/28/21 12:04	01/28/21 17:54	1
Lead	**1.6**		0.50	0.50	ug/L		01/28/21 12:04	01/28/21 17:54	1
Zinc	**39**		2.5	2.5	ug/L		01/28/21 12:04	01/28/21 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**19**		1.3	0.67	mg/L			01/28/21 17:07	1

Client Sample ID: SG1-01252021-WD

Date Collected: 01/25/21 11:00
Date Received: 01/26/21 17:50

Lab Sample ID: 440-277950-2

Matrix: Water

Method: 8270C SIM - PAHs (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.19	0.069	ug/L		01/29/21 12:25	02/01/21 13:39	1
2-Methylnaphthalene	ND		0.19	0.073	ug/L		01/29/21 12:25	02/01/21 13:39	1
Acenaphthene	ND		0.19	0.092	ug/L		01/29/21 12:25	02/01/21 13:39	1
Acenaphthylene	ND		0.19	0.065	ug/L		01/29/21 12:25	02/01/21 13:39	1
Anthracene	ND		0.19	0.056	ug/L		01/29/21 12:25	02/01/21 13:39	1
Benzo[g,h,i]perylene	ND		0.19	0.095	ug/L		01/29/21 12:25	02/01/21 13:39	1
Benzo[k]fluoranthene	ND		0.19	0.088	ug/L		01/29/21 12:25	02/01/21 13:39	1
Benzo[a]anthracene	ND		0.19	0.081	ug/L		01/29/21 12:25	02/01/21 13:39	1
Benzo[a]pyrene	ND		0.19	0.059	ug/L		01/29/21 12:25	02/01/21 13:39	1
Benzo[b]fluoranthene	ND		0.19	0.11	ug/L		01/29/21 12:25	02/01/21 13:39	1
Chrysene	ND		0.19	0.056	ug/L		01/29/21 12:25	02/01/21 13:39	1
Dibenz(a,h)anthracene	ND		0.19	0.11	ug/L		01/29/21 12:25	02/01/21 13:39	1
Fluoranthene	ND		0.19	0.064	ug/L		01/29/21 12:25	02/01/21 13:39	1
Fluorene	ND		0.19	0.071	ug/L		01/29/21 12:25	02/01/21 13:39	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.10	ug/L		01/29/21 12:25	02/01/21 13:39	1
Naphthalene	ND		0.19	0.078	ug/L		01/29/21 12:25	02/01/21 13:39	1

Client Sample ID: SG1-01252021-WD

Date Collected: 01/25/21 11:00
Date Received: 01/26/21 17:50

Lab Sample ID: 440-277950-2

Matrix: Water

Method: 8270C SIM - PAHs (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.19	0.069	ug/L		01/29/21 12:25	02/01/21 13:39	1
Pyrene	ND		0.19	0.062	ug/L		01/29/21 12:25	02/01/21 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*89*		*33 - 144*	*01/29/21 12:25*	*02/01/21 13:39*	*1*
Nitrobenzene-d5 (Surr)	*89*		*28 - 139*	*01/29/21 12:25*	*02/01/21 13:39*	*1*
p-Terphenyl-d14 (Surr)	*70*		*23 - 160*	*01/29/21 12:25*	*02/01/21 13:39*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.0095	0.0026	ug/L		02/01/21 05:40	02/02/21 09:44	1
4,4'-DDE	ND		0.0038	0.0016	ug/L		02/01/21 05:40	02/02/21 09:44	1
4,4'-DDT	ND		0.0095	0.0049	ug/L		02/01/21 05:40	02/02/21 09:44	1
Aldrin	ND		0.0095	0.0021	ug/L		02/01/21 05:40	02/02/21 09:44	1
alpha-BHC	ND		0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:44	1
alpha-Chlordane	ND		0.0038	0.0018	ug/L		02/01/21 05:40	02/02/21 09:44	1
beta-BHC	ND		0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:44	1
Chlordane	ND		0.019	0.0069	ug/L		02/01/21 05:40	02/02/21 09:44	1
delta-BHC	ND		0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:44	1
Dieldrin	ND		0.0095	0.0022	ug/L		02/01/21 05:40	02/02/21 09:44	1
Endosulfan I	**0.026**		0.0095	0.0023	ug/L		02/01/21 05:40	02/02/21 09:44	1
Endosulfan II	ND		0.0095	0.0020	ug/L		02/01/21 05:40	02/02/21 09:44	1
Endosulfan sulfate	ND		0.0095	0.0026	ug/L		02/01/21 05:40	02/02/21 09:44	1
Endrin	ND		0.0038	0.0019	ug/L		02/01/21 05:40	02/02/21 09:44	1
Endrin aldehyde	ND		0.019	0.0061	ug/L		02/01/21 05:40	02/02/21 09:44	1
Endrin ketone	ND		0.0095	0.0024	ug/L		02/01/21 05:40	02/02/21 09:44	1
gamma-Chlordane	ND		0.0095	0.0026	ug/L		02/01/21 05:40	02/02/21 09:44	1
gamma-BHC (Lindane)	ND		0.0038	0.0013	ug/L		02/01/21 05:40	02/02/21 09:44	1
Heptachlor	ND		0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:44	1
Heptachlor epoxide	ND		0.0038	0.0015	ug/L		02/01/21 05:40	02/02/21 09:44	1
Methoxychlor	ND		0.0095	0.0037	ug/L		02/01/21 05:40	02/02/21 09:44	1
Toxaphene	ND		0.057	0.028	ug/L		02/01/21 05:40	02/02/21 09:44	1
2,4'-DDT	ND		0.0038	0.0016	ug/L		02/01/21 05:40	02/02/21 09:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*59*		*20 - 162*	*02/01/21 05:40*	*02/02/21 09:44*	*1*
DCB Decachlorobiphenyl (Surr)	*55*		*20 - 141*	*02/01/21 05:40*	*02/02/21 09:44*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 16:14	1
Aroclor-1221	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 16:14	1
Aroclor-1232	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 16:14	1
Aroclor-1242	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 16:14	1
Aroclor-1248	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 16:14	1
Aroclor-1254	ND		0.47	0.29	ug/L		01/29/21 16:08	02/01/21 16:14	1
Aroclor-1260	ND		0.47	0.29	ug/L		01/29/21 16:08	02/01/21 16:14	1
Aroclor-1262	ND		0.47	0.29	ug/L		01/29/21 16:08	02/01/21 16:14	1
Aroclor-1268	ND		0.47	0.29	ug/L		01/29/21 16:08	02/01/21 16:14	1

Client Sample ID: SG1-01252021-WD

Date Collected: 01/25/21 11:00
Date Received: 01/26/21 17:50

Lab Sample ID: 440-277950-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*85*		*20 - 139*	*01/29/21 16:08*	*02/01/21 16:14*	*1*
DCB Decachlorobiphenyl (Surr)	*71*		*20 - 154*	*01/29/21 16:08*	*02/01/21 16:14*	*1*

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	**11**		0.50	0.50	ug/L		01/28/21 12:04	01/28/21 17:52	1
Lead	**1.8**		0.50	0.50	ug/L		01/28/21 12:04	01/28/21 17:52	1
Zinc	**39**		2.5	2.5	ug/L		01/28/21 12:04	01/28/21 17:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**22**		1.3	0.67	mg/L			01/28/21 17:07	1

Client Sample ID: SG1-01252021-EB

Date Collected: 01/25/21 10:10
Date Received: 01/26/21 17:50

Lab Sample ID: 440-277950-3
Matrix: Water

Method: 8270C SIM - PAHs (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.19	0.070	ug/L		01/29/21 12:25	02/01/21 14:02	1
2-Methylnaphthalene	ND		0.19	0.074	ug/L		01/29/21 12:25	02/01/21 14:02	1
Acenaphthene	ND		0.19	0.093	ug/L		01/29/21 12:25	02/01/21 14:02	1
Acenaphthylene	ND		0.19	0.066	ug/L		01/29/21 12:25	02/01/21 14:02	1
Anthracene	ND		0.19	0.057	ug/L		01/29/21 12:25	02/01/21 14:02	1
Benzo[g,h,i]perylene	ND		0.19	0.097	ug/L		01/29/21 12:25	02/01/21 14:02	1
Benzo[k]fluoranthene	ND		0.19	0.090	ug/L		01/29/21 12:25	02/01/21 14:02	1
Benzo[a]anthracene	ND		0.19	0.082	ug/L		01/29/21 12:25	02/01/21 14:02	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		01/29/21 12:25	02/01/21 14:02	1
Benzo[b]fluoranthene	ND		0.19	0.11	ug/L		01/29/21 12:25	02/01/21 14:02	1
Chrysene	ND		0.19	0.057	ug/L		01/29/21 12:25	02/01/21 14:02	1
Dibenz(a,h)anthracene	ND		0.19	0.11	ug/L		01/29/21 12:25	02/01/21 14:02	1
Fluoranthene	ND		0.19	0.065	ug/L		01/29/21 12:25	02/01/21 14:02	1
Fluorene	ND		0.19	0.072	ug/L		01/29/21 12:25	02/01/21 14:02	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.10	ug/L		01/29/21 12:25	02/01/21 14:02	1
Naphthalene	ND		0.19	0.079	ug/L		01/29/21 12:25	02/01/21 14:02	1
Phenanthrene	ND		0.19	0.070	ug/L		01/29/21 12:25	02/01/21 14:02	1
Pyrene	ND		0.19	0.064	ug/L		01/29/21 12:25	02/01/21 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*96*		*33 - 144*	*01/29/21 12:25*	*02/01/21 14:02*	*1*
Nitrobenzene-d5 (Surr)	*93*		*28 - 139*	*01/29/21 12:25*	*02/01/21 14:02*	*1*
p-Terphenyl-d14 (Surr)	*96*		*23 - 160*	*01/29/21 12:25*	*02/01/21 14:02*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.011	0.0029	ug/L		02/01/21 05:40	02/02/21 05:43	1
4,4'-DDE	ND		0.0043	0.0018	ug/L		02/01/21 05:40	02/02/21 05:43	1
4,4'-DDT	ND		0.011	0.0055	ug/L		02/01/21 05:40	02/02/21 05:43	1
Aldrin	ND		0.011	0.0023	ug/L		02/01/21 05:40	02/02/21 05:43	1
alpha-BHC	ND		0.0043	0.0016	ug/L		02/01/21 05:40	02/02/21 05:43	1
alpha-Chlordane	ND		0.0043	0.0020	ug/L		02/01/21 05:40	02/02/21 05:43	1

Client Sample ID: SG1-01252021-EB

Date Collected: 01/25/21 10:10
Date Received: 01/26/21 17:50

Lab Sample ID: 440-277950-3

Matrix: Water

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	ND		0.0043	0.0016	ug/L		02/01/21 05:40	02/02/21 05:43	1
Chlordane	ND		0.021	0.0078	ug/L		02/01/21 05:40	02/02/21 05:43	1
delta-BHC	ND		0.0043	0.0016	ug/L		02/01/21 05:40	02/02/21 05:43	1
Dieldrin	ND		0.011	0.0024	ug/L		02/01/21 05:40	02/02/21 05:43	1
Endosulfan I	ND		0.011	0.0026	ug/L		02/01/21 05:40	02/02/21 05:43	1
Endosulfan II	ND		0.011	0.0022	ug/L		02/01/21 05:40	02/02/21 05:43	1
Endosulfan sulfate	ND		0.011	0.0029	ug/L		02/01/21 05:40	02/02/21 05:43	1
Endrin	ND		0.0043	0.0021	ug/L		02/01/21 05:40	02/02/21 05:43	1
Endrin aldehyde	ND		0.021	0.0068	ug/L		02/01/21 05:40	02/02/21 05:43	1
Endrin ketone	ND		0.011	0.0027	ug/L		02/01/21 05:40	02/02/21 05:43	1
gamma-Chlordane	ND		0.011	0.0030	ug/L		02/01/21 05:40	02/02/21 05:43	1
gamma-BHC (Lindane)	ND		0.0043	0.0015	ug/L		02/01/21 05:40	02/02/21 05:43	1
Heptachlor	ND		0.0043	0.0016	ug/L		02/01/21 05:40	02/02/21 05:43	1
Heptachlor epoxide	ND		0.0043	0.0017	ug/L		02/01/21 05:40	02/02/21 05:43	1
Methoxychlor	ND		0.011	0.0041	ug/L		02/01/21 05:40	02/02/21 05:43	1
Toxaphene	ND		0.064	0.031	ug/L		02/01/21 05:40	02/02/21 05:43	1
2,4'-DDT	ND		0.0043	0.0018	ug/L		02/01/21 05:40	02/02/21 05:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*20 - 162*	*02/01/21 05:40*	*02/02/21 05:43*	*1*
DCB Decachlorobiphenyl (Surr)	*49*		*20 - 141*	*02/01/21 05:40*	*02/02/21 05:43*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.48	0.17	ug/L		01/29/21 16:08	02/01/21 16:33	1
Aroclor-1221	ND		0.48	0.17	ug/L		01/29/21 16:08	02/01/21 16:33	1
Aroclor-1232	ND		0.48	0.17	ug/L		01/29/21 16:08	02/01/21 16:33	1
Aroclor-1242	ND		0.48	0.17	ug/L		01/29/21 16:08	02/01/21 16:33	1
Aroclor-1248	ND		0.48	0.17	ug/L		01/29/21 16:08	02/01/21 16:33	1
Aroclor-1254	ND		0.48	0.29	ug/L		01/29/21 16:08	02/01/21 16:33	1
Aroclor-1260	ND		0.48	0.29	ug/L		01/29/21 16:08	02/01/21 16:33	1
Aroclor-1262	ND		0.48	0.29	ug/L		01/29/21 16:08	02/01/21 16:33	1
Aroclor-1268	ND		0.48	0.29	ug/L		01/29/21 16:08	02/01/21 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*89*		*20 - 139*	*01/29/21 16:08*	*02/01/21 16:33*	*1*
DCB Decachlorobiphenyl (Surr)	*64*		*20 - 154*	*01/29/21 16:08*	*02/01/21 16:33*	*1*

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.50	0.50	ug/L		01/28/21 12:04	01/28/21 17:50	1
Lead	ND		0.50	0.50	ug/L		01/28/21 12:04	01/28/21 17:50	1
Zinc	ND		2.5	2.5	ug/L		01/28/21 12:04	01/28/21 17:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	0.50	mg/L			01/28/21 17:07	1

Client: CH2M Hill, Inc.
Project/Site: KMEP/SFPP Norwalk Site

Job ID: 440-277950-1

Client Sample ID: SG1-01252021-MS/MSD

Date Collected: 01/25/21 11:00
Date Received: 01/26/21 17:50

Lab Sample ID: 440-277950-4

Matrix: Water

Method: 8270C SIM - PAHs (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.19	0.069	ug/L		01/29/21 12:25	02/01/21 14:25	1
2-Methylnaphthalene	ND		0.19	0.073	ug/L		01/29/21 12:25	02/01/21 14:25	1
Acenaphthene	ND		0.19	0.092	ug/L		01/29/21 12:25	02/01/21 14:25	1
Acenaphthylene	ND		0.19	0.065	ug/L		01/29/21 12:25	02/01/21 14:25	1
Anthracene	ND		0.19	0.056	ug/L		01/29/21 12:25	02/01/21 14:25	1
Benzo[g,h,i]perylene	ND		0.19	0.096	ug/L		01/29/21 12:25	02/01/21 14:25	1
Benzo[k]fluoranthene	ND		0.19	0.088	ug/L		01/29/21 12:25	02/01/21 14:25	1
Benzo[a]anthracene	ND		0.19	0.081	ug/L		01/29/21 12:25	02/01/21 14:25	1
Benzo[a]pyrene	ND		0.19	0.059	ug/L		01/29/21 12:25	02/01/21 14:25	1
Benzo[b]fluoranthene	ND		0.19	0.11	ug/L		01/29/21 12:25	02/01/21 14:25	1
Chrysene	ND		0.19	0.056	ug/L		01/29/21 12:25	02/01/21 14:25	1
Dibenz(a,h)anthracene	ND		0.19	0.11	ug/L		01/29/21 12:25	02/01/21 14:25	1
Fluoranthene	ND	F2	0.19	0.064	ug/L		01/29/21 12:25	02/01/21 14:25	1
Fluorene	ND		0.19	0.071	ug/L		01/29/21 12:25	02/01/21 14:25	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.10	ug/L		01/29/21 12:25	02/01/21 14:25	1
Naphthalene	ND		0.19	0.078	ug/L		01/29/21 12:25	02/01/21 14:25	1
Phenanthrene	ND		0.19	0.069	ug/L		01/29/21 12:25	02/01/21 14:25	1
Pyrene	ND		0.19	0.063	ug/L		01/29/21 12:25	02/01/21 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*90*		*33 - 144*	*01/29/21 12:25*	*02/01/21 14:25*	*1*
Nitrobenzene-d5 (Surr)	*85*		*28 - 139*	*01/29/21 12:25*	*02/01/21 14:25*	*1*
p-Terphenyl-d14 (Surr)	*63*		*23 - 160*	*01/29/21 12:25*	*02/01/21 14:25*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	F1	0.0095	0.0026	ug/L		02/01/21 05:40	02/02/21 09:58	1
4,4'-DDE	ND	F1	0.0038	0.0016	ug/L		02/01/21 05:40	02/02/21 09:58	1
4,4'-DDT	ND	F2 F1	0.0095	0.0049	ug/L		02/01/21 05:40	02/02/21 09:58	1
Aldrin	ND	F1	0.0095	0.0021	ug/L		02/01/21 05:40	02/02/21 09:58	1
alpha-BHC	ND	F1	0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:58	1
alpha-Chlordane	ND	F1	0.0038	0.0018	ug/L		02/01/21 05:40	02/02/21 09:58	1
beta-BHC	ND	F2	0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:58	1
Chlordane	ND		0.019	0.0069	ug/L		02/01/21 05:40	02/02/21 09:58	1
delta-BHC	ND	F2 F1	0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:58	1
Dieldrin	ND	F1	0.0095	0.0022	ug/L		02/01/21 05:40	02/02/21 09:58	1
Endosulfan I	**0.051**	**F1**	0.0095	0.0023	ug/L		02/01/21 05:40	02/02/21 09:58	1
Endosulfan II	ND	F2	0.0095	0.0020	ug/L		02/01/21 05:40	02/02/21 09:58	1
Endosulfan sulfate	ND	F1	0.0095	0.0026	ug/L		02/01/21 05:40	02/02/21 09:58	1
Endrin	ND	F1	0.0038	0.0019	ug/L		02/01/21 05:40	02/02/21 09:58	1
Endrin aldehyde	ND	F1	0.019	0.0061	ug/L		02/01/21 05:40	02/02/21 09:58	1
Endrin ketone	ND		0.0095	0.0024	ug/L		02/01/21 05:40	02/02/21 09:58	1
gamma-Chlordane	ND	F1	0.0095	0.0027	ug/L		02/01/21 05:40	02/02/21 09:58	1
gamma-BHC (Lindane)	ND	F1	0.0038	0.0013	ug/L		02/01/21 05:40	02/02/21 09:58	1
Heptachlor	ND	F1	0.0038	0.0014	ug/L		02/01/21 05:40	02/02/21 09:58	1
Heptachlor epoxide	ND	F1	0.0038	0.0015	ug/L		02/01/21 05:40	02/02/21 09:58	1
Methoxychlor	ND	F1	0.0095	0.0037	ug/L		02/01/21 05:40	02/02/21 09:58	1
Toxaphene	ND		0.057	0.028	ug/L		02/01/21 05:40	02/02/21 09:58	1
2,4'-DDT	ND		0.0038	0.0016	ug/L		02/01/21 05:40	02/02/21 09:58	1

Client: CH2M Hill, Inc.
Project/Site: KMEP/SFPP Norwalk Site

Job ID: 440-277950-1

Client Sample ID: SG1-01252021-MS/MSD

Date Collected: 01/25/21 11:00
Date Received: 01/26/21 17:50

Lab Sample ID: 440-277950-4

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*76*		*20 - 162*	*02/01/21 05:40*	*02/02/21 09:58*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*20 - 141*	*02/01/21 05:40*	*02/02/21 09:58*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 16:52	1
Aroclor-1221	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 16:52	1
Aroclor-1232	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 16:52	1
Aroclor-1242	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 16:52	1
Aroclor-1248	ND		0.47	0.17	ug/L		01/29/21 16:08	02/01/21 16:52	1
Aroclor-1254	ND		0.47	0.29	ug/L		01/29/21 16:08	02/01/21 16:52	1
Aroclor-1260	ND	F1 F2	0.47	0.29	ug/L		01/29/21 16:08	02/01/21 16:52	1
Aroclor-1262	ND		0.47	0.29	ug/L		01/29/21 16:08	02/01/21 16:52	1
Aroclor-1268	ND		0.47	0.29	ug/L		01/29/21 16:08	02/01/21 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene (Surr)	*82*		*20 - 139*	*01/29/21 16:08*	*02/01/21 16:52*	*1*
DCB Decachlorobiphenyl (Surr)	*69*		*20 - 154*	*01/29/21 16:08*	*02/01/21 16:52*	*1*

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	**11**		0.50	0.50	ug/L		01/28/21 12:04	01/28/21 17:44	1
Lead	**1.9**		0.50	0.50	ug/L		01/28/21 12:04	01/28/21 17:44	1
Zinc	**39**		2.5	2.5	ug/L		01/28/21 12:04	01/28/21 17:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**23**		2.0	1.0	mg/L			01/28/21 17:07	1

Method Summary

Client: CH2M Hill, Inc.
Project/Site: KMEP/SFPP Norwalk Site

Job ID: 440-277950-1

Method	Method Description	Protocol	Laboratory
8270C SIM	PAHs (GC/MS SIM)	SW846	ECL 1
8081A	Organochlorine Pesticides (GC)	SW846	ECL 1
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	ECL 1
200.8	Metals (ICP/MS)	EPA	TAL IRV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL IRV
200.2	Preparation, Total Recoverable Metals	EPA	TAL IRV
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: KMEP/SFPP Norwalk Site

Job ID: 440-277950-1

Client Sample ID: SG1-01252021-WW

Lab Sample ID: 440-277950-1

Date Collected: 01/25/21 11:00

Matrix: Water

Date Received: 01/26/21 17:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1057.8 mL	2 mL	125585	01/29/21 12:25	H1SH	ECL 1
Total/NA	Analysis	8270C SIM		1			125942	02/01/21 13:17	AJ2Q	ECL 1
Total/NA	Prep	3510C			1058.8 mL	1 mL	125869	02/01/21 05:40	H1SH	ECL 1
Total/NA	Analysis	8081A		1			126076	02/02/21 09:30	UHHN	ECL 1
Total/NA	Prep	3510C			1059.8 mL	5 mL	125660	01/29/21 16:08	USUL	ECL 1
Total/NA	Analysis	8082		1			125926	02/01/21 15:55	UHHN	ECL 1
Total Recoverable	Prep	200.2			25 mL	25 mL	637273	01/28/21 12:04	LZY7	TAL IRV
Total Recoverable	Analysis	200.8		1			637312	01/28/21 17:54	SQ5O	TAL IRV
Total/NA	Analysis	SM 2540D		1	750 mL	1000 mL	637307	01/28/21 17:07	ZL7L	TAL IRV

Client Sample ID: SG1-01252021-WD

Lab Sample ID: 440-277950-2

Date Collected: 01/25/21 11:00

Matrix: Water

Date Received: 01/26/21 17:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1060.6 mL	2 mL	125585	01/29/21 12:25	H1SH	ECL 1
Total/NA	Analysis	8270C SIM		1			125942	02/01/21 13:39	AJ2Q	ECL 1
Total/NA	Prep	3510C			1057.5 mL	1 mL	125869	02/01/21 05:40	H1SH	ECL 1
Total/NA	Analysis	8081A		1			126076	02/02/21 09:44	UHHN	ECL 1
Total/NA	Prep	3510C			1057.6 mL	5 mL	125660	01/29/21 16:08	USUL	ECL 1
Total/NA	Analysis	8082		1			125926	02/01/21 16:14	UHHN	ECL 1
Total Recoverable	Prep	200.2			25 mL	25 mL	637273	01/28/21 12:04	LZY7	TAL IRV
Total Recoverable	Analysis	200.8		1			637312	01/28/21 17:52	SQ5O	TAL IRV
Total/NA	Analysis	SM 2540D		1	750 mL	1000 mL	637307	01/28/21 17:07	ZL7L	TAL IRV

Client Sample ID: SG1-01252021-EB

Lab Sample ID: 440-277950-3

Date Collected: 01/25/21 10:10

Matrix: Water

Date Received: 01/26/21 17:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1040.3 mL	2 mL	125585	01/29/21 12:25	H1SH	ECL 1
Total/NA	Analysis	8270C SIM		1			125942	02/01/21 14:02	AJ2Q	ECL 1
Total/NA	Prep	3510C			940.5 mL	1 mL	125869	02/01/21 05:40	H1SH	ECL 1
Total/NA	Analysis	8081A		1			126076	02/02/21 05:43	UHHN	ECL 1
Total/NA	Prep	3510C			1037.7 mL	5 mL	125660	01/29/21 16:08	USUL	ECL 1
Total/NA	Analysis	8082		1			125926	02/01/21 16:33	UHHN	ECL 1
Total Recoverable	Prep	200.2			25 mL	25 mL	637273	01/28/21 12:04	LZY7	TAL IRV
Total Recoverable	Analysis	200.8		1			637312	01/28/21 17:50	SQ5O	TAL IRV
Total/NA	Analysis	SM 2540D		1	1000 mL	1000 mL	637307	01/28/21 17:07	ZL7L	TAL IRV

Lab Chronicle

Client: CH2M Hill, Inc.
Job ID: 440-277950-1
Project/Site: KMEP/SFPP Norwalk Site

Client Sample ID: SG1-01252021-MS/MSD
Lab Sample ID: 440-277950-4

Date Collected: 01/25/21 11:00
Matrix: Water
Date Received: 01/26/21 17:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1056.7 mL	2 mL	125585	01/29/21 12:25	H1SH	ECL 1
Total/NA	Analysis	8270C SIM		1			125942	02/01/21 14:25	AJ2Q	ECL 1
Total/NA	Prep	3510C			1052.6 mL	1 mL	125869	02/01/21 05:40	H1SH	ECL 1
Total/NA	Analysis	8081A		1			126076	02/02/21 09:58	UHHN	ECL 1
Total/NA	Prep	3510C			1057.7 mL	5 mL	125660	01/29/21 16:08	USUL	ECL 1
Total/NA	Analysis	8082		1			125926	02/01/21 16:52	UHHN	ECL 1
Total Recoverable	Prep	200.2			25 mL	25 mL	637273	01/28/21 12:04	LZY7	TAL IRV
Total Recoverable	Analysis	200.8		1			637312	01/28/21 17:44	SQ5O	TAL IRV
Total/NA	Analysis	SM 2540D		1	500 mL	1000 mL	637307	01/28/21 17:07	ZL7L	TAL IRV

Laboratory References:

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

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8270C SIM - PAHs (GC/MS SIM)

Lab Sample ID: MB 570-125585/1-A
Matrix: Water
Analysis Batch: 125942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.20	0.073	ug/L		01/29/21 12:25	02/01/21 11:00	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		01/29/21 12:25	02/01/21 11:00	1
Acenaphthene	ND		0.20	0.097	ug/L		01/29/21 12:25	02/01/21 11:00	1
Acenaphthylene	ND		0.20	0.069	ug/L		01/29/21 12:25	02/01/21 11:00	1
Anthracene	ND		0.20	0.059	ug/L		01/29/21 12:25	02/01/21 11:00	1
Benzo[g,h,i]perylene	ND		0.20	0.10	ug/L		01/29/21 12:25	02/01/21 11:00	1
Benzo[k]fluoranthene	ND		0.20	0.093	ug/L		01/29/21 12:25	02/01/21 11:00	1
Benzo[a]anthracene	ND		0.20	0.086	ug/L		01/29/21 12:25	02/01/21 11:00	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		01/29/21 12:25	02/01/21 11:00	1
Benzo[b]fluoranthene	ND		0.20	0.12	ug/L		01/29/21 12:25	02/01/21 11:00	1
Chrysene	ND		0.20	0.059	ug/L		01/29/21 12:25	02/01/21 11:00	1
Dibenz(a,h)anthracene	ND		0.20	0.12	ug/L		01/29/21 12:25	02/01/21 11:00	1
Fluoranthene	ND		0.20	0.068	ug/L		01/29/21 12:25	02/01/21 11:00	1
Fluorene	ND		0.20	0.075	ug/L		01/29/21 12:25	02/01/21 11:00	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.11	ug/L		01/29/21 12:25	02/01/21 11:00	1
Naphthalene	ND		0.20	0.083	ug/L		01/29/21 12:25	02/01/21 11:00	1
Phenanthrene	ND		0.20	0.073	ug/L		01/29/21 12:25	02/01/21 11:00	1
Pyrene	ND		0.20	0.066	ug/L		01/29/21 12:25	02/01/21 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*108*		*33 - 144*	*01/29/21 12:25*	*02/01/21 11:00*	*1*
Nitrobenzene-d5 (Surr)	*106*		*28 - 139*	*01/29/21 12:25*	*02/01/21 11:00*	*1*
p-Terphenyl-d14 (Surr)	*111*		*23 - 160*	*01/29/21 12:25*	*02/01/21 11:00*	*1*

Lab Sample ID: LCS 570-125585/2-A
Matrix: Water
Analysis Batch: 125942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	2.00	2.06		ug/L		103	20 - 140
2-Methylnaphthalene	2.00	2.21		ug/L		110	21 - 140
Acenaphthene	2.00	1.89		ug/L		95	55 - 121
Acenaphthylene	2.00	2.11		ug/L		105	33 - 145
Anthracene	2.00	2.08		ug/L		104	27 - 133
Benzo[g,h,i]perylene	2.00	1.75		ug/L		87	25 - 157
Benzo[k]fluoranthene	2.00	1.72		ug/L		86	24 - 159
Benzo[a]anthracene	2.00	2.15		ug/L		108	33 - 143
Benzo[a]pyrene	2.00	2.02		ug/L		101	17 - 163
Benzo[b]fluoranthene	2.00	1.97		ug/L		98	24 - 159
Chrysene	2.00	1.99		ug/L		99	17 - 168
Dibenz(a,h)anthracene	2.00	1.34		ug/L		67	25 - 175
Fluoranthene	2.00	1.64		ug/L		82	26 - 137
Fluorene	2.00	2.05		ug/L		102	59 - 121
Indeno[1,2,3-cd]pyrene	2.00	1.49		ug/L		75	25 - 175
Naphthalene	2.00	2.03		ug/L		102	21 - 133
Phenanthrene	2.00	2.02		ug/L		101	54 - 120
Pyrene	2.00	2.19		ug/L		109	45 - 129

Method: 8270C SIM - PAHs (GC/MS SIM) (Continued)

Lab Sample ID: LCS 570-125585/2-A
Matrix: Water
Analysis Batch: 125942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125585

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	97		33 - 144
Nitrobenzene-d5 (Surr)	99		28 - 139
p-Terphenyl-d14 (Surr)	96		23 - 160

Lab Sample ID: LCSD 570-125585/3-A
Matrix: Water
Analysis Batch: 125942

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 125585

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene			2.00	2.14		ug/L		107	20 - 140	4	25
2-Methylnaphthalene			2.00	2.18		ug/L		109	21 - 140	1	25
Acenaphthene			2.00	1.96		ug/L		98	55 - 121	3	25
Acenaphthylene			2.00	2.13		ug/L		107	33 - 145	1	25
Anthracene			2.00	2.15		ug/L		107	27 - 133	3	25
Benzo[g,h,i]perylene			2.00	1.79		ug/L		89	25 - 157	2	25
Benzo[k]fluoranthene			2.00	1.87		ug/L		93	24 - 159	8	25
Benzo[a]anthracene			2.00	2.16		ug/L		108	33 - 143	0	25
Benzo[a]pyrene			2.00	2.01		ug/L		101	17 - 163	1	25
Benzo[b]fluoranthene			2.00	1.89		ug/L		94	24 - 159	4	25
Chrysene			2.00	2.09		ug/L		104	17 - 168	5	25
Dibenz(a,h)anthracene			2.00	1.38		ug/L		69	25 - 175	3	25
Fluoranthene			2.00	1.96		ug/L		98	26 - 137	18	25
Fluorene			2.00	2.09		ug/L		104	59 - 121	2	25
Indeno[1,2,3-cd]pyrene			2.00	1.50		ug/L		75	25 - 175	0	25
Naphthalene			2.00	2.04		ug/L		102	21 - 133	1	25
Phenanthrene			2.00	2.09		ug/L		105	54 - 120	4	25
Pyrene			2.00	2.34		ug/L		117	45 - 129	7	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	97		33 - 144
Nitrobenzene-d5 (Surr)	99		28 - 139
p-Terphenyl-d14 (Surr)	101		23 - 160

Lab Sample ID: 440-277950-4 MS
Matrix: Water
Analysis Batch: 125942

Client Sample ID: SG1-01252021
Prep Type: Total/NA
Prep Batch: 125585

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	ND		1.90	2.02		ug/L		107	20 - 140
2-Methylnaphthalene	ND		1.90	2.06		ug/L		109	21 - 140
Acenaphthene	ND		1.90	1.83		ug/L		96	49 - 121
Acenaphthylene	ND		1.90	2.01		ug/L		106	33 - 145
Anthracene	ND		1.90	2.23		ug/L		118	27 - 133
Benzo[g,h,i]perylene	ND		1.90	0.954		ug/L		50	10 - 227
Benzo[k]fluoranthene	ND		1.90	1.04		ug/L		55	24 - 159
Benzo[a]anthracene	ND		1.90	1.59		ug/L		84	33 - 143
Benzo[a]pyrene	ND		1.90	1.12		ug/L		59	17 - 163
Benzo[b]fluoranthene	ND		1.90	0.925		ug/L		49	24 - 159

Method: 8270C SIM - PAHs (GC/MS SIM) (Continued)

Lab Sample ID: 440-277950-4 MS
Matrix: Water
Analysis Batch: 125942

Client Sample ID: SG1-01252021
Prep Type: Total/NA
Prep Batch: 125585

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	ND		1.90	1.64		ug/L		86	17 - 168
Dibenz(a,h)anthracene	ND		1.90	0.887		ug/L		47	10 - 219
Fluoranthene	ND	F2	1.90	2.12		ug/L		112	26 - 137
Fluorene	ND		1.90	1.97		ug/L		104	59 - 121
Indeno[1,2,3-cd]pyrene	ND		1.90	0.869		ug/L		46	10 - 171
Naphthalene	ND		1.90	1.99		ug/L		105	21 - 133
Phenanthrene	ND		1.90	1.42		ug/L		75	54 - 120
Pyrene	ND		1.90	2.04		ug/L		107	18 - 168

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*94*		*33 - 144*
Nitrobenzene-d5 (Surr)	*95*		*28 - 139*
p-Terphenyl-d14 (Surr)	*75*		*23 - 160*

Lab Sample ID: 440-277950-4 MSD
Matrix: Water
Analysis Batch: 125942

Client Sample ID: SG1-01252021
Prep Type: Total/NA
Prep Batch: 125585

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	ND		1.89	1.83		ug/L		97	20 - 140	10	25
2-Methylnaphthalene	ND		1.89	1.88		ug/L		99	21 - 140	9	25
Acenaphthene	ND		1.89	1.69		ug/L		89	49 - 121	8	25
Acenaphthylene	ND		1.89	1.85		ug/L		98	33 - 145	8	25
Anthracene	ND		1.89	1.94		ug/L		103	27 - 133	14	25
Benzo[g,h,i]perylene	ND		1.89	0.777		ug/L		41	10 - 227	21	25
Benzo[k]fluoranthene	ND		1.89	0.870		ug/L		46	24 - 159	18	25
Benzo[a]anthracene	ND		1.89	1.36		ug/L		72	33 - 143	16	25
Benzo[a]pyrene	ND		1.89	0.925		ug/L		49	17 - 163	19	25
Benzo[b]fluoranthene	ND		1.89	0.837		ug/L		44	24 - 159	10	25
Chrysene	ND		1.89	1.39		ug/L		74	17 - 168	16	25
Dibenz(a,h)anthracene	ND		1.89	0.717		ug/L		38	10 - 219	21	25
Fluoranthene	ND	F2	1.89	1.63	F2	ug/L		86	26 - 137	26	25
Fluorene	ND		1.89	1.80		ug/L		95	59 - 121	9	25
Indeno[1,2,3-cd]pyrene	ND		1.89	0.693		ug/L		37	10 - 171	23	25
Naphthalene	ND		1.89	1.78		ug/L		94	21 - 133	11	25
Phenanthrene	ND		1.89	1.27		ug/L		67	54 - 120	11	25
Pyrene	ND		1.89	1.80		ug/L		95	18 - 168	12	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*87*		*33 - 144*
Nitrobenzene-d5 (Surr)	*88*		*28 - 139*
p-Terphenyl-d14 (Surr)	*68*		*23 - 160*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 570-125869/1-A
Matrix: Water
Analysis Batch: 126076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125869

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.010	0.0027	ug/L		02/01/21 05:40	02/02/21 05:00	1
4,4'-DDE	ND		0.0040	0.0017	ug/L		02/01/21 05:40	02/02/21 05:00	1
4,4'-DDT	ND		0.010	0.0052	ug/L		02/01/21 05:40	02/02/21 05:00	1
Aldrin	ND		0.010	0.0022	ug/L		02/01/21 05:40	02/02/21 05:00	1
alpha-BHC	ND		0.0040	0.0015	ug/L		02/01/21 05:40	02/02/21 05:00	1
alpha-Chlordane	ND		0.0040	0.0019	ug/L		02/01/21 05:40	02/02/21 05:00	1
beta-BHC	ND		0.0040	0.0015	ug/L		02/01/21 05:40	02/02/21 05:00	1
Chlordane	ND		0.020	0.0073	ug/L		02/01/21 05:40	02/02/21 05:00	1
delta-BHC	ND		0.0040	0.0015	ug/L		02/01/21 05:40	02/02/21 05:00	1
Dieldrin	ND		0.010	0.0023	ug/L		02/01/21 05:40	02/02/21 05:00	1
Endosulfan I	ND		0.010	0.0024	ug/L		02/01/21 05:40	02/02/21 05:00	1
Endosulfan II	ND		0.010	0.0021	ug/L		02/01/21 05:40	02/02/21 05:00	1
Endosulfan sulfate	ND		0.010	0.0027	ug/L		02/01/21 05:40	02/02/21 05:00	1
Endrin	ND		0.0040	0.0020	ug/L		02/01/21 05:40	02/02/21 05:00	1
Endrin aldehyde	ND		0.020	0.0064	ug/L		02/01/21 05:40	02/02/21 05:00	1
Endrin ketone	ND		0.010	0.0025	ug/L		02/01/21 05:40	02/02/21 05:00	1
gamma-Chlordane	ND		0.010	0.0028	ug/L		02/01/21 05:40	02/02/21 05:00	1
gamma-BHC (Lindane)	ND		0.0040	0.0014	ug/L		02/01/21 05:40	02/02/21 05:00	1
Heptachlor	ND		0.0040	0.0015	ug/L		02/01/21 05:40	02/02/21 05:00	1
Heptachlor epoxide	ND		0.0040	0.0016	ug/L		02/01/21 05:40	02/02/21 05:00	1
Methoxychlor	ND		0.010	0.0039	ug/L		02/01/21 05:40	02/02/21 05:00	1
Toxaphene	ND		0.060	0.029	ug/L		02/01/21 05:40	02/02/21 05:00	1
2,4'-DDT	ND		0.0040	0.0017	ug/L		02/01/21 05:40	02/02/21 05:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*44*		*20 - 162*	*02/01/21 05:40*	*02/02/21 05:00*	*1*
DCB Decachlorobiphenyl (Surr)	*35*		*20 - 141*	*02/01/21 05:40*	*02/02/21 05:00*	*1*

Lab Sample ID: LCS 570-125869/2-A
Matrix: Water
Analysis Batch: 126418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125869

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.0500	0.0313		ug/L		63	27 - 163
4,4'-DDE	0.0500	0.0324		ug/L		65	25 - 156
4,4'-DDT	0.0500	0.0316		ug/L		63	25 - 155
Aldrin	0.0500	0.0312		ug/L		62	20 - 140
alpha-BHC	0.0500	0.0319		ug/L		64	20 - 152
alpha-Chlordane	0.0500	0.0290		ug/L		58	23 - 148
beta-BHC	0.0500	0.0307		ug/L		61	25 - 156
delta-BHC	0.0500	0.0182		ug/L		36	20 - 170
Dieldrin	0.0500	0.0299		ug/L		60	26 - 154
Endosulfan I	0.0500	0.0282		ug/L		56	20 - 154
Endosulfan II	0.0500	0.0302		ug/L		60	33 - 150
Endosulfan sulfate	0.0500	0.0276		ug/L		55	20 - 149
Endrin	0.0500	0.0286		ug/L		57	34 - 154
Endrin aldehyde	0.0500	0.0307		ug/L		61	20 - 157
gamma-Chlordane	0.0500	0.0309		ug/L		62	20 - 172

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 570-125869/2-A
Matrix: Water
Analysis Batch: 126418

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125869

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
gamma-BHC (Lindane)	0.0500	0.0321		ug/L		64	24 - 152
Heptachlor	0.0500	0.0322		ug/L		64	26 - 147
Heptachlor epoxide	0.0500	0.0306		ug/L		61	28 - 151
Methoxychlor	0.0500	0.0347		ug/L		69	30 - 154

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*20 - 162*
DCB Decachlorobiphenyl (Surr)	*86*		*20 - 141*

Lab Sample ID: LCSD 570-125869/3-A
Matrix: Water
Analysis Batch: 126418

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 125869

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	0.0500	0.0311		ug/L		62	27 - 163	0	30
4,4'-DDE	0.0500	0.0325		ug/L		65	25 - 156	0	30
4,4'-DDT	0.0500	0.0312		ug/L		62	25 - 155	1	30
Aldrin	0.0500	0.0312		ug/L		62	20 - 140	0	30
alpha-BHC	0.0500	0.0318		ug/L		64	20 - 152	0	30
alpha-Chlordane	0.0500	0.0292		ug/L		58	23 - 148	1	30
beta-BHC	0.0500	0.0315		ug/L		63	25 - 156	3	30
delta-BHC	0.0500	0.0179		ug/L		36	20 - 170	2	30
Dieldrin	0.0500	0.0297		ug/L		59	26 - 154	0	30
Endosulfan I	0.0500	0.0285		ug/L		57	20 - 154	1	30
Endosulfan II	0.0500	0.0299		ug/L		60	33 - 150	1	30
Endosulfan sulfate	0.0500	0.0277		ug/L		55	20 - 149	0	30
Endrin	0.0500	0.0288		ug/L		58	34 - 154	1	30
Endrin aldehyde	0.0500	0.0303		ug/L		61	20 - 157	1	30
gamma-Chlordane	0.0500	0.0307		ug/L		61	20 - 172	0	30
gamma-BHC (Lindane)	0.0500	0.0318		ug/L		64	24 - 152	1	30
Heptachlor	0.0500	0.0322		ug/L		64	26 - 147	0	30
Heptachlor epoxide	0.0500	0.0307		ug/L		61	28 - 151	0	30
Methoxychlor	0.0500	0.0358		ug/L		72	30 - 154	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*20 - 162*
DCB Decachlorobiphenyl (Surr)	*85*		*20 - 141*

Lab Sample ID: 440-277950-4 MS
Matrix: Water
Analysis Batch: 126076

Client Sample ID: SG1-01252021
Prep Type: Total/NA
Prep Batch: 125869

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F1	0.0474	0.0234	F1	ug/L		49	50 - 135
4,4'-DDE	ND	F1	0.0474	0.0132	F1 p	ug/L		28	50 - 135
4,4'-DDT	ND	F2 F1	0.0474	0.0221	F1	ug/L		47	50 - 135
Aldrin	ND	F1	0.0474	0.0171	F1	ug/L		36	50 - 135
alpha-BHC	ND	F1	0.0474	0.0266		ug/L		56	50 - 135

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 440-277950-4 MS
Matrix: Water
Analysis Batch: 126076

Client Sample ID: SG1-01252021
Prep Type: Total/NA
Prep Batch: 125869

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
alpha-Chlordane	ND	F1	0.0474	0.0188	F1	ug/L		40	50 - 135
beta-BHC	ND	F2	0.0474	0.0289		ug/L		61	50 - 135
delta-BHC	ND	F2 F1	0.0474	0.00549	F1 p	ug/L		12	50 - 135
Dieldrin	ND	F1	0.0474	0.0275		ug/L		58	50 - 135
Endosulfan I	0.051	F1	0.0474	0.0505	F1	ug/L		-2	50 - 135
Endosulfan II	ND	F2	0.0474	0.0337		ug/L		71	50 - 135
Endosulfan sulfate	ND	F1	0.0474	0.0258		ug/L		55	50 - 135
Endrin	ND	F1	0.0474	0.0223	F1	ug/L		47	50 - 135
Endrin aldehyde	ND	F1	0.0474	0.0296		ug/L		62	50 - 135
gamma-Chlordane	ND	F1	0.0474	0.0173	F1 p	ug/L		36	50 - 135
gamma-BHC (Lindane)	ND	F1	0.0474	0.0233	F1 p	ug/L		49	50 - 135
Heptachlor	ND	F1	0.0474	0.0200	F1	ug/L		42	50 - 135
Heptachlor epoxide	ND	F1	0.0474	0.0217	F1	ug/L		46	50 - 135
Methoxychlor	ND	F1	0.0474	0.0226	F1	ug/L		48	50 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*61*		*20 - 162*
DCB Decachlorobiphenyl (Surr)	*46*		*20 - 141*

Lab Sample ID: 440-277950-4 MSD
Matrix: Water
Analysis Batch: 126076

Client Sample ID: SG1-01252021
Prep Type: Total/NA
Prep Batch: 125869

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F1	0.0475	0.0210	p F1	ug/L		44	50 - 135	11	25
4,4'-DDE	ND	F1	0.0475	0.0121	p F1	ug/L		25	50 - 135	9	25
4,4'-DDT	ND	F2 F1	0.0475	0.0145	p F2 F1	ug/L		31	50 - 135	41	25
Aldrin	ND	F1	0.0475	0.0161	F1	ug/L		34	50 - 135	6	25
alpha-BHC	ND	F1	0.0475	0.0243		ug/L		51	50 - 135	9	25
alpha-Chlordane	ND	F1	0.0475	0.0176	F1	ug/L		37	50 - 135	6	25
beta-BHC	ND	F2	0.0475	0.0265	p	ug/L		56	50 - 135	9	25
delta-BHC	ND	F2 F1	0.0475	0.00745	p F2 F1	ug/L		16	50 - 135	30	25
Dieldrin	ND	F1	0.0475	0.0279		ug/L		59	50 - 135	1	25
Endosulfan I	0.051	F1	0.0475	0.0503	F1	ug/L		-2	50 - 135	0	25
Endosulfan II	ND	F2	0.0475	0.0253	p F2	ug/L		53	50 - 135	29	25
Endosulfan sulfate	ND	F1	0.0475	0.0313		ug/L		66	50 - 135	19	25
Endrin	ND	F1	0.0475	0.0240		ug/L		50	50 - 135	7	25
Endrin aldehyde	ND	F1	0.0475	0.0298		ug/L		63	50 - 135	1	25
gamma-Chlordane	ND	F1	0.0475	0.0161	p F1	ug/L		34	50 - 135	7	25
gamma-BHC (Lindane)	ND	F1	0.0475	0.0216	p F1	ug/L		45	50 - 135	8	25
Heptachlor	ND	F1	0.0475	0.0198	F1	ug/L		42	50 - 135	1	25
Heptachlor epoxide	ND	F1	0.0475	0.0206	F1	ug/L		43	50 - 135	5	25
Methoxychlor	ND	F1	0.0475	0.0325	F2	ug/L		68	50 - 135	36	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*55*		*20 - 162*
DCB Decachlorobiphenyl (Surr)	*46*	*p*	*20 - 141*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 570-125660/1-A
Matrix: Water
Analysis Batch: 125926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	ND		0.50	0.18	ug/L		01/29/21 16:08	02/01/21 13:23	1
Aroclor-1221	ND		0.50	0.18	ug/L		01/29/21 16:08	02/01/21 13:23	1
Aroclor-1232	ND		0.50	0.18	ug/L		01/29/21 16:08	02/01/21 13:23	1
Aroclor-1242	ND		0.50	0.18	ug/L		01/29/21 16:08	02/01/21 13:23	1
Aroclor-1248	ND		0.50	0.18	ug/L		01/29/21 16:08	02/01/21 13:23	1
Aroclor-1254	ND		0.50	0.31	ug/L		01/29/21 16:08	02/01/21 13:23	1
Aroclor-1260	ND		0.50	0.31	ug/L		01/29/21 16:08	02/01/21 13:23	1
Aroclor-1262	ND		0.50	0.31	ug/L		01/29/21 16:08	02/01/21 13:23	1
Aroclor-1268	ND		0.50	0.31	ug/L		01/29/21 16:08	02/01/21 13:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*87*		*20 - 139*	*01/29/21 16:08*	*02/01/21 13:23*	*1*
DCB Decachlorobiphenyl (Surr)	*95*		*20 - 154*	*01/29/21 16:08*	*02/01/21 13:23*	*1*

Lab Sample ID: LCS 570-125660/2-A
Matrix: Water
Analysis Batch: 125926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125660

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			1.00	0.794		ug/L		79	50 - 135		
Aroclor-1260			1.00	1.10		ug/L		110	50 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*93*		*20 - 139*
DCB Decachlorobiphenyl (Surr)	*105*		*20 - 154*

Lab Sample ID: LCSD 570-125660/3-A
Matrix: Water
Analysis Batch: 125926

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 125660

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016			1.00	0.738		ug/L		74	50 - 135	7	25
Aroclor-1260			1.00	0.959		ug/L		96	50 - 135	14	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*83*		*20 - 139*
DCB Decachlorobiphenyl (Surr)	*100*		*20 - 154*

Lab Sample ID: 440-277950-4 MS
Matrix: Water
Analysis Batch: 125926

Client Sample ID: SG1-01252021
Prep Type: Total/NA
Prep Batch: 125660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	ND		0.945	0.917		ug/L		97	50 - 135		
Aroclor-1260	ND	F1 F2	0.945	1.73	F1	ug/L		183	50 - 135		

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 440-277950-4 MS
Matrix: Water
Analysis Batch: 125926

Client Sample ID: SG1-01252021
Prep Type: Total/NA
Prep Batch: 125660

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*96*		*20 - 139*
DCB Decachlorobiphenyl (Surr)	*83*		*20 - 154*

Lab Sample ID: 440-277950-4 MSD
Matrix: Water
Analysis Batch: 125926

Client Sample ID: SG1-01252021
Prep Type: Total/NA
Prep Batch: 125660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	ND		0.943	0.925		ug/L		98	50 - 135	1	25
Aroclor-1260	ND	F1 F2	0.943	1.29	F1 F2	ug/L		137	50 - 135	29	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*90*		*20 - 139*
DCB Decachlorobiphenyl (Surr)	*79*		*20 - 154*

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 440-637273/1-A
Matrix: Water
Analysis Batch: 637312

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 637273

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.50	0.50	ug/L		01/28/21 12:04	01/28/21 17:40	1
Lead	ND		0.50	0.50	ug/L		01/28/21 12:04	01/28/21 17:40	1
Zinc	ND		2.5	2.5	ug/L		01/28/21 12:04	01/28/21 17:40	1

Lab Sample ID: LCS 440-637273/2-A
Matrix: Water
Analysis Batch: 637312

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 637273

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	80.0	77.9		ug/L		97	85 - 115
Lead	80.0	75.9		ug/L		95	85 - 115
Zinc	80.0	76.8		ug/L		96	85 - 115

Lab Sample ID: 440-277950-4 MS
Matrix: Water
Analysis Batch: 637312

Client Sample ID: SG1-01252021
Prep Type: Total Recoverable
Prep Batch: 637273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	11		80.0	67.5		ug/L		70	70 - 130
Lead	1.9		80.0	63.7		ug/L		77	70 - 130
Zinc	39		80.0	102		ug/L		79	70 - 130

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-277950-4 MSD
Matrix: Water
Analysis Batch: 637312

Client Sample ID: SG1-01252021
Prep Type: Total Recoverable
Prep Batch: 637273

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	11		80.0	67.7		ug/L		70	70 - 130	0	20
Lead	1.9		80.0	62.8		ug/L		76	70 - 130	1	20
Zinc	39		80.0	101		ug/L		77	70 - 130	1	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-637307/1
Matrix: Water
Analysis Batch: 637307

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	0.50	mg/L			01/28/21 17:07	1

Lab Sample ID: LCS 440-637307/2
Matrix: Water
Analysis Batch: 637307

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			1000	1020		mg/L		102	85 - 115		

Lab Sample ID: 440-277950-4 DU
Matrix: Water
Analysis Batch: 637307

Client Sample ID: SG1-01252021
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	23			22.8		mg/L				3	10

GC/MS Semi VOA

Prep Batch: 125585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-277950-1	SG1-01252021-WW	Total/NA	Water	3510C	
440-277950-2	SG1-01252021-WD	Total/NA	Water	3510C	
440-277950-3	SG1-01252021-EB	Total/NA	Water	3510C	
440-277950-4	SG1-01252021-MS/MSD	Total/NA	Water	3510C	
MB 570-125585/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-125585/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-125585/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
440-277950-4 MS	SG1-01252021	Total/NA	Water	3510C	
440-277950-4 MSD	SG1-01252021	Total/NA	Water	3510C	

Analysis Batch: 125942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-277950-1	SG1-01252021-WW	Total/NA	Water	8270C SIM	125585
440-277950-2	SG1-01252021-WD	Total/NA	Water	8270C SIM	125585
440-277950-3	SG1-01252021-EB	Total/NA	Water	8270C SIM	125585
440-277950-4	SG1-01252021-MS/MSD	Total/NA	Water	8270C SIM	125585
MB 570-125585/1-A	Method Blank	Total/NA	Water	8270C SIM	125585
LCS 570-125585/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	125585
LCSD 570-125585/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	125585
440-277950-4 MS	SG1-01252021	Total/NA	Water	8270C SIM	125585
440-277950-4 MSD	SG1-01252021	Total/NA	Water	8270C SIM	125585

GC Semi VOA

Prep Batch: 125660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-277950-1	SG1-01252021-WW	Total/NA	Water	3510C	
440-277950-2	SG1-01252021-WD	Total/NA	Water	3510C	
440-277950-3	SG1-01252021-EB	Total/NA	Water	3510C	
440-277950-4	SG1-01252021-MS/MSD	Total/NA	Water	3510C	
MB 570-125660/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-125660/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-125660/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
440-277950-4 MS	SG1-01252021	Total/NA	Water	3510C	
440-277950-4 MSD	SG1-01252021	Total/NA	Water	3510C	

Prep Batch: 125869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-277950-1	SG1-01252021-WW	Total/NA	Water	3510C	
440-277950-2	SG1-01252021-WD	Total/NA	Water	3510C	
440-277950-3	SG1-01252021-EB	Total/NA	Water	3510C	
440-277950-4	SG1-01252021-MS/MSD	Total/NA	Water	3510C	
MB 570-125869/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-125869/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-125869/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
440-277950-4 MS	SG1-01252021	Total/NA	Water	3510C	
440-277950-4 MSD	SG1-01252021	Total/NA	Water	3510C	

Analysis Batch: 125926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-277950-1	SG1-01252021-WW	Total/NA	Water	8082	125660

GC Semi VOA (Continued)

Analysis Batch: 125926 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-277950-2	SG1-01252021-WD	Total/NA	Water	8082	125660
440-277950-3	SG1-01252021-EB	Total/NA	Water	8082	125660
440-277950-4	SG1-01252021-MS/MSD	Total/NA	Water	8082	125660
MB 570-125660/1-A	Method Blank	Total/NA	Water	8082	125660
LCS 570-125660/2-A	Lab Control Sample	Total/NA	Water	8082	125660
LCSD 570-125660/3-A	Lab Control Sample Dup	Total/NA	Water	8082	125660
440-277950-4 MS	SG1-01252021	Total/NA	Water	8082	125660
440-277950-4 MSD	SG1-01252021	Total/NA	Water	8082	125660

Analysis Batch: 126076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-277950-1	SG1-01252021-WW	Total/NA	Water	8081A	125869
440-277950-2	SG1-01252021-WD	Total/NA	Water	8081A	125869
440-277950-3	SG1-01252021-EB	Total/NA	Water	8081A	125869
440-277950-4	SG1-01252021-MS/MSD	Total/NA	Water	8081A	125869
MB 570-125869/1-A	Method Blank	Total/NA	Water	8081A	125869
440-277950-4 MS	SG1-01252021	Total/NA	Water	8081A	125869
440-277950-4 MSD	SG1-01252021	Total/NA	Water	8081A	125869

Analysis Batch: 126418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-125869/2-A	Lab Control Sample	Total/NA	Water	8081A	125869
LCSD 570-125869/3-A	Lab Control Sample Dup	Total/NA	Water	8081A	125869

Metals

Prep Batch: 637273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-277950-1	SG1-01252021-WW	Total Recoverable	Water	200.2	
440-277950-2	SG1-01252021-WD	Total Recoverable	Water	200.2	
440-277950-3	SG1-01252021-EB	Total Recoverable	Water	200.2	
440-277950-4	SG1-01252021-MS/MSD	Total Recoverable	Water	200.2	
MB 440-637273/1-A	Method Blank	Total Recoverable	Water	200.2	
LCS 440-637273/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
440-277950-4 MS	SG1-01252021	Total Recoverable	Water	200.2	
440-277950-4 MSD	SG1-01252021	Total Recoverable	Water	200.2	

Analysis Batch: 637312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-277950-1	SG1-01252021-WW	Total Recoverable	Water	200.8	637273
440-277950-2	SG1-01252021-WD	Total Recoverable	Water	200.8	637273
440-277950-3	SG1-01252021-EB	Total Recoverable	Water	200.8	637273
440-277950-4	SG1-01252021-MS/MSD	Total Recoverable	Water	200.8	637273
MB 440-637273/1-A	Method Blank	Total Recoverable	Water	200.8	637273
LCS 440-637273/2-A	Lab Control Sample	Total Recoverable	Water	200.8	637273
440-277950-4 MS	SG1-01252021	Total Recoverable	Water	200.8	637273
440-277950-4 MSD	SG1-01252021	Total Recoverable	Water	200.8	637273

General Chemistry

Analysis Batch: 637307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-277950-1	SG1-01252021-WW	Total/NA	Water	SM 2540D	
440-277950-2	SG1-01252021-WD	Total/NA	Water	SM 2540D	
440-277950-3	SG1-01252021-EB	Total/NA	Water	SM 2540D	
440-277950-4	SG1-01252021-MS/MSD	Total/NA	Water	SM 2540D	
MB 440-637307/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 440-637307/2	Lab Control Sample	Total/NA	Water	SM 2540D	
440-277950-4 DU	SG1-01252021	Total/NA	Water	SM 2540D	

Definitions/Glossary

Client: CH2M Hill, Inc.
Project/Site: KMEP/SFPP Norwalk Site

Job ID: 440-277950-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

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

Accreditation/Certification Summary

Client: CH2M Hill, Inc.
Job ID: 440-277950-1
Project/Site: KMEP/SFPP Norwalk Site

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2706	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 2540D		Water	Total Suspended Solids

Laboratory: Eurofins Calscience LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2944	09-30-21

Eurofins Calscience Laboratories

CHAIN OF CUSTODY RECORD

DATE: January 25, 2021
PAGE: 1 of 1

Section A (Required Client Information)		Section B (Required Project Information)		Section C (Invoice Information)		Section D (Sampler Information)	
Company:	Kinder Morgan Energy Partners Attention: Ryan Koch	Report To:	Eric Davis	Attention:	Court Reece - Ref. AFE# 81195	Sampler Name:	Nils Orliczky
Address:	1001 Louisiana St., Houston, TX 77002	Copy To:	Court Reece	Company Name	Kinder Morgan Energy Partners	Sampler Signature:	
Email To	Court_Reece@kindermorgan.com eric.davis@jacobs.com, nils.orliczky@jacobs.com	Purchase Order No.:		Address:	1001 Louisiana St., Houston, TX 77002	Sample Date:	1-25-21
Phone: 713-420-6730	Fax: 714-560-4801	Project Name:	SFPP Norwalk	E.C. Project Manager:	Janice Hsu		

ITEM #	SAMPLE ID	LOCATION/ DESCRIPTION	MATRIX	SAMPLE TYPE (G=GRAB C=COMP)	SAMPLING DATE	SAMPLING TIME	TOTAL # OF CONTAINERS	Analysis Test	Total Suspended Solids (SM2540D)	Metals (EPA 200.8 Cu, Pb, Zn)	Pesticides (SW8081A) (2,4-DDT, 4,4-DDT)	PAHs (SW8270A-SIM)	Total PCBs (EPA 8082)
	CONTAINER TYPE								P	P	A	A	A
	# OF CONTAINERS								1	1	2	2	2
	PRESERVATIVE								--	N	--	--	--
	VOLUME (mL)								1000	500	1000	1000	1000
1	SG1-01252021-WW	San Gabriel River	WW	G	1/25/21	1100	8		X	X	X	X	X
2	SG1-01252021-WD	San Gabriel River	WW	G	1/25/21	1105	8		X	X	X	X	X
3	SG1-01252021-EB	Equipment Blank	W	G	1/25/21	1010	8		X	X	X	X	X
4	SG1-01252021-MS/MSD	MS/MSD Sample	WW	G	1/25/21	1100	16		X	X	X	X	X
5													
6													
7													
8													
9													
10													
11													
12													

1-25-21

440-277950 Chain of Custody

Comments

PAHs: 1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, acenaphthylene, anthracene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene

Pesticides: 2,4-DDT, 4,4-DDT reported as Total DDT

Provide MS/MSD as a seperate sample

Relinquished by (Signature and Printed Name)	Date / Time	Recieved by (Signature and Printed Name)	Date / Time
	1-26-21 / 1754	EC-JHV	1/26/21 1750
Relinquished by (Signature and Printed Name)	Date / Time	Recieved by (Signature and Printed Name)	Date / Time
Relinquished by (Signature and Printed Name)	Date / Time	Recieved by (Signature and Printed Name)	Date / Time

Turn Around Time (TAT):

- ☐ A = Same Day
- ☐ B = 24 Hours
- ☐ C = 48 Hours
- ☐ D = 72 Hours
- ☐ E = 5 Workdays
- ☑ E = 10 Workdays

TAT Starts at 8 AM the following day if samples received after 3:00 PM

Special Instruction

Also report pesticides as Total DDT
Provide EDD in EQuIS EQEDD format

.3/.1
.7/.5
.6/.4
.7/.5

ZB-93

Matrix			Preservatives			Container Type			
W = Water	WW = Wastewater		H = HCl	N = HNO3	S = H2SO4	T = Tube	V = VOA	P = Pint	A = Amber
O = Oil	P = Product	S = Soil	Z = Zn(AC)2	O = NaOH	T = Na2S2O3	J = Jar	B = Bedjar	G = Glass	
Other/Specify			Others/Specify			M = Metal	P = Plastic	C = Can	

Eurofins Calscience Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone. 949-261-1022 Fax: 949-260-3297

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Hsu, Janice	Carrier Tracking No(s):	COC No: 440-165901 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Janice Hsu@Eurofinset.com	State of Origin: California	Page: Page 1 of 1
Company: Eurofins Calscience LLC		Accreditations Required (See note): State - California		Job #: 440-277950-1
Address: 7440 Lincoln Way, ,	Due Date Requested: 2/15/2021			
City: Garden Grove	TAT Requested (days):			
State, Zip: CA, 92841				
Phone: 714-895-5494(Tel) 714-894-7501(Fax)	PO #:			
Email	WO #:			
Project Name: KMEP/SFPP Norwalk Site	Project #: 44011238			
Site: KMEP Norwalk Airs	SSOW#:			

Analysis Requested

Preservation Codes.

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270C_SIM_PAH/3510C SIM PAH	8081A_LL/3510C_LL Routine Pesticides List	8082/3510C Routine PCB List	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SG1-01252021-WW (440-277950-1)	1/25/21	11:00 Pacific		Water			X	X	X	3	
SG1-01252021-WD (440-277950-2)	1/25/21	11:00 Pacific		Water			X	X	X	3	
SG1-01252021-EB (440-277950-3)	1/25/21	10:10 Pacific		Water			X	X	X	3	
SG1-01252021 (440-277950-4)	1/25/21	11:00 Pacific		Water			X	X	X	3	
SG1-01252021 (440-277950-4MS)	1/25/21	11:00 Pacific	MS	Water			X	X	X	3	
SG1-01252021 (440-277950-4MSD)	1/25/21	11:00 Pacific	MSD	Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Calscience attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Calscience.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Olga Pinelas	1/27/21	EC-IRV		1/27/21 1600	ECI
2		1/27/21 1730	ECI		1/27/21 1730	ECI
3		Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: NA	Cooler Temperature(s) °C and Other Remarks: 3-0/1.9 SLC

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: CH2M Hill, Inc.

Job Number: 440-277950-1

Login Number: 277950
List Number: 1
Creator: Skinner, Alma D

List Source: Eurofins Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
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.	N/A	
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	

Login Sample Receipt Checklist

Client: CH2M Hill, Inc.

Job Number: 440-277950-1

Login Number: 277950
List Number: 2
Creator: Rivera, Isaac

List Source: Eurofins Calscience
List Creation: 01/28/21 02:19 PM

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.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
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	1.9
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	

Attachment B
Data Quality Assurance/Quality Control

Data Quality Assurance/Quality Control

Data quality was evaluated by examining the holding times, laboratory method blanks, surrogate percent recoveries, laboratory control sample/laboratory control sample duplicates (LCS/LCSD) and matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent differences (RPDs). Data quality review results for each analysis are outlined in the following subsections.

Analytical Data

The data quality evaluation report covers two normal effluent samples. Samples were collected on January 22 and February 2, 2021. Analyses were performed by Asset Laboratories in Cerritos, California and BC Laboratories in Bakersfield, California. The sample results were reported as two sample delivery groups:

Sample Delivery Groups
N043863
N044016

Eleven methods were used to analyze the environmental samples. Samples were collected and submitted directly to the Asset Laboratories for analysis. Asset Laboratories was responsible for shipment of samples to all other laboratories. Samples were analyzed for one or more of the following analytes/method:

Parameter	Method
Turbidity	SM2130B
Total suspended solids	SM2540D
Settleable solids	SM2540F
Biochemical oxygen demand (BOD)	SM5210B
Oil and grease	E1664
Metals	EPA 200.8/EPA 245.1
Ammonia	SM4500-NH3-G
Total petroleum hydrocarbons – gasoline, diesel and motor oil ranges	SW8015B
Volatile organic compounds	SW8260B
Phenol	SW8270C

Data validation flags were assigned using guidance from the EPA Contract Laboratory National Functional Guidelines for Organic Superfund Methods Data Review (EPA, 2017) and EPA Contract Laboratory National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA, 2017). Multiple flags are routinely applied to specific sample method/ matrix/ analyte combinations, but there will be only one final flag. A final flag is applied to the data and is the most conservative of the applied data validation flags. The final flag also includes blank sample impacts.

The data validation flags are as follows:

- J = Analyte was present, but the reported value may not be accurate or precise (estimated). The result was estimated because it was less than the referenced reporting limit, but greater than the method detection limit, or because a QC exceedance occurred.
- R = Data were unusable because of deficiencies in the ability to analyze the sample and meet QC criteria.
- U = Analyte was not detected at the specified detection limit.
- UJ = Analyte was not detected, and the specified detection limit may not be accurate or precise (estimated).

Findings

The overall summaries of the data validation findings are contained in the following subsections.

Holding Times

All holding time criteria were met.

Method Blanks

Method blanks were analyzed at the required frequency and were free of contamination that would affect the sample results with the following exceptions:

- TPH-gasoline was detected less than the reporting limit (RL) in the method blanks for Method SW8015B. Two associated results were detected less than five times the blank concentrations and were qualified as not detected and flagged "U" in samples EFF-012221 and EFF-020221.
- Mercury was detected less than the RL in the method blanks for Method EPA 245.1. Two associated results were detected less than five times the blank concentrations and were qualified as not detected and flagged "U" in samples EFF-012221 and EFF-020221.

Surrogates

All surrogate recovery criteria were met with one exception.

Surrogate recovery was less than the lower control limit in sample EFF-020221 for Method SW8270C, indicating the associated sample result is possibly biased low. One associated nondetected result was qualified as estimated and flagged "UJ".

Internal Standards

All internal standard criteria were met.

Laboratory Control Samples

LCS/LCSDs were analyzed as required. All accuracy and precision criteria were met.

Matrix Spikes/Matrix Spike Duplicates

The results of MS/MSD analyses provide information about the possible influence of the matrix on either accuracy or precision of the measurements. There were no MS/MSD recovery or RPD exceedances that would affect the sample results with one exception.

The recovery of tert-butyl alcohol was less than the lower control limit in the MS of sample EFF-020221 for Method SW8260B, indicating the associated sample result is possibly biased low. One associated nondetected result was qualified as estimated and flagged "UJ".

Chain-of-Custody

Each sample was documented in a completed COC and received at the laboratory in good condition.

Overall Assessment

An overall evaluation of the data indicates that the sample handling, shipment, and analytical procedures have been adequately completed, and that the analytical results are considered usable taking into consideration possible biases as described above.

Attachment C
Waste Manifest

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CAT080033962
2. Page 1 of: 1
3. Emergency Response Phone: 800 624-9136
4. Manifest Tracking Number: 010792939 JJK

GENERATOR

5. Generator's Name and Mailing Address:
Att: Jeff Bordelon
SFPP, LP (Norwalk Station)
1001 Louisiana Street EHS 8th Floor
Houston TX 77002
Generator's Phone: 713 420-6216

Generator's Site Address (if different than mailing address)
SFPP, LP (Norwalk Station)
15306 Norwalk Blvd.
Norwalk CA 90650

6. Transporter 1 Company Name: Patriot Environmental Services
U.S. EPA ID Number: CAD053866794

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address:
DK DBA WORLD OIL RECYCLING
2000 N. ALAMEDA STREET
COMPTON CA 90222
Facility's Phone: 310 537-7100
U.S. EPA ID Number: CAT080013352

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN1993, WASTE Flammable liquids, n.o.s. (Gasoline) 3, PGII	01	TT	2100	G	D001	D018	134
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information: 1)(I,E) Profile # - Gasoline ERG#128

Always wear appropriate PPE when handling waste. JOB# 01-21-00110

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: x JAMES DYE — Signature: x — Month: 1 Day: 19 Year: 21

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: x Marcos Ruiz — Signature: x — Month: 1 Day: 19 Year: 21

Transporter 2 Printed/Typed Name: — Signature: — Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: — Signature: — Month: Day: Year:

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)